

ASTOUNDING

STORIES 20¢



FORBIDDEN LIGHT

BY *James Montague*

Weinbaum
Gallun
Reinster
Haggard
Diffin

ALSO

On Sale Third Wednesday of Each Month

VOLUME XVI
NUMBER 4

ASTOUNDING STORIES

DECEMBER
1935

A STREET & SMITH PUBLICATION

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Cover Painting by Howard V. Brown

Story illustrations by Elliott Dold, Jr., M. Marchioni,
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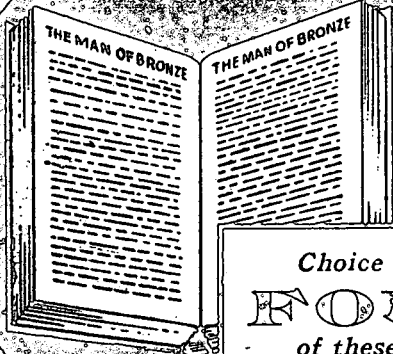
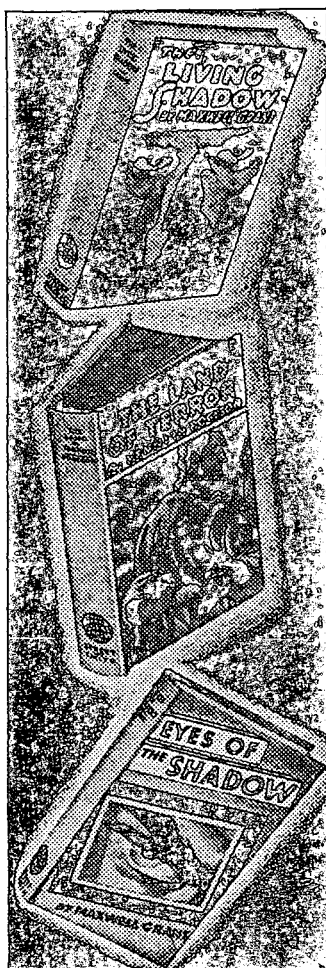
Monthly publication issued by Street & Smith Publications, Inc., 79-89 Seventh Avenue, New York, N. Y. George C. Smith, Jr., President; Ormond V. Gould, Vice President and Treasurer; Artemas Holmes, Vice President and Secretary; Clarence C. Vernam, Vice President. Copyright, 1935, by Street & Smith Publications, Inc., New York. Copyright, 1935, by Street & Smith Publications, Inc., Great Britain. Entered as Second-class Matter September 13, 1933, at the Post Office at New York, N. Y., under Act of Congress of March 3, 1879. Subscriptions to Cuba, Dom. Republic, Haiti, Spain, Central and South American Countries except The Guitanas and British Honduras, \$2.25 per year. To all other Foreign Countries, including The Guitanas and British Honduras, \$2.75 per year.

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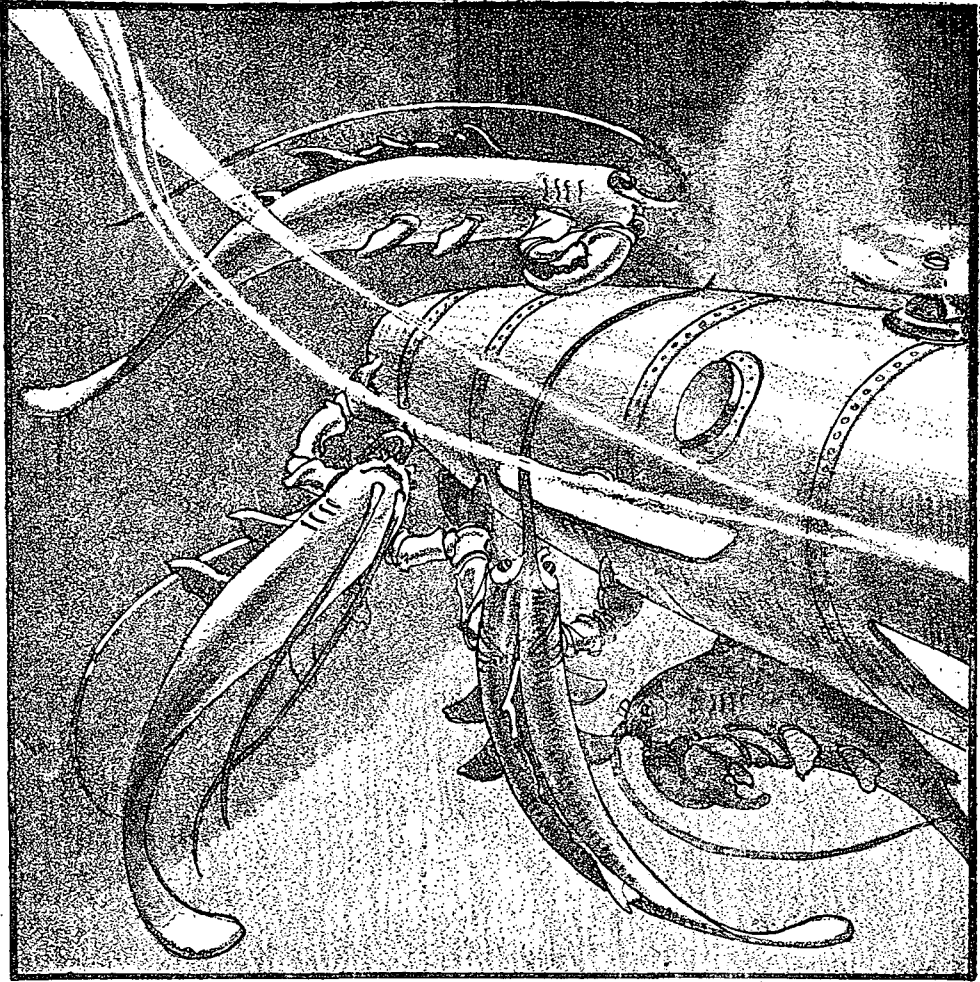
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DAVEY JONES'



by Raymond Z. Gallun

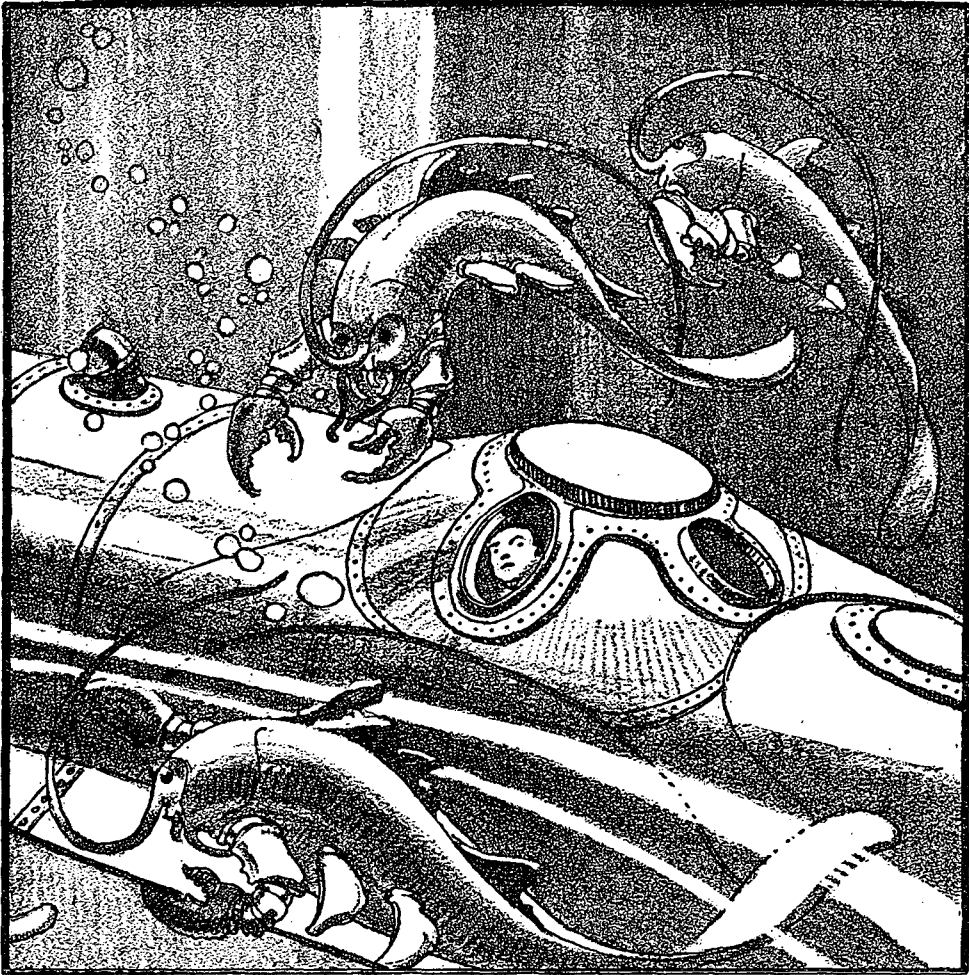
IT DIDN'T look like a jet of water at all. It seemed too rigid, like a rod of glass; and it spattered over the instruments with a brittle, jingling sound, for such was the effect of the pressure behind it: more than four thousand pounds per square inch—the weight of nearly two and a half miles of black ocean.

Cliff Rodney, hunched in the pilot

seat, stared at the widening stream. It made him see how good a thing life was, and how empty and drab the alternative was going to be. Cliff Rodney was young; he did not wish to die.

A few seconds ago all had been normal aboard the bathyspheric submarine. The velvet darkness of the depths, visible beyond the massive ports of the craft, had inspired awe in him, as it

AMBASSADOR



*Cliff's blood ran cold as he watched the fleshy beak closing
in nearer, nearer—*

always would in human hearts; but to Cliff it had become familiar. The same was true of the schools of phosphorescent fish shining foggily through the gloom, and of the swarms of nether-world horrors that had darted in the bright golden path of the search beam.

Clifford Rodney, during his explorations, had grown accustomed to these elements of the deep-sea environment,

until they had assumed an aspect that was almost friendly.

But the illusion that it was safe here had been abruptly broken. Sinuous, rusty shadows, which bore a suggestion of menace that was new to him, had surged toward the submarine from out of the surrounding murk and ooze.

Attenuated, spidery crustaceans with long feelers had burrowed into the shel-

ter of the mud beneath them. Little fish, some of them equipped with lamp-like organs, some blind and lightless, all of them, at once dreadful and comic with their needle-fanged jaws and grotesque heads, had scattered in terror.

Bulbous medusæ, contracting and expanding their umbrella-shaped bodies, had swam hurriedly away. Even the pallid anemones had displayed defensive attitudes in the guarded contraction of their flowerlike crowns.

With canny craft the unknowns had avoided the search beam. Cliff had glimpsed only the swift motion of monstrous, armored limbs, and the baneful glitter of great eyes. Then the blow had fallen, like that of a battering ram. It had struck the forward observation port with a grinding concussion.

A crack, looking like a twisted ribbon of silver, had appeared in the thick, vitreous substance of the pane. From it, water had begun to spurt in a slender, unstanchable shaft that grew ominously as the sea spread the edges of the crevice wider and wider apart.

Automatically Cliff had done what he could. He had set the vertical screws of his craft churning at top speed to raise it toward the surface. But, in a moment, the blades had met with fierce resistance, as though clutched and held. The motors had refused to turn. The submarine had sunk back into the muck of the Atlantic's bed. An S O S was the last resort.

Cliff had sent it out quickly, knowing that though it would be picked up by the *Etruria*, the surface ship that served as his base of operations; nothing could be done to help him. He had reached the end of his resources.

NOW, there was a breathless pause. The blackness without was inky. Cliff continued to gaze impotently at that slim cylinder of water. Ricocheting bits of it struck him, stinging fiercely, but he did not heed. It fascinated him,

making him forget, almost, how it had all happened. His mind was blurred so that it conceived odd notions.

Pretty, the way that jet of water broke apart when it hit the bright metal of the instruments. You wouldn't think that it was dangerous. Flying droplets scattered here and there like jewels, each of them glinting in the shaded glow of the light bulbs. And the sounds they made resembled the chucklings of elves and fairies.

A small creature of the depths, sucked through the breach, burst with a dull plop as the pressure of its normal habitat was removed.

He and that creature had much in common, Rodney thought. Both were pawns which chance had elected to annihilate. Only he was a man; men boasted of their control over natural forces. And he himself was a blatant and ironic symbol of that boast: They had sent him here in the belief that even the bed of the Atlantic might soon yield to human dominance!

The submarine gave a gentle lurch. The youth's eyes sharpened to a keener focus. A yard beyond the fractured port a pair of orbs hung suspended. Beneath them was a fleshy beak that opened and closed as the creature sucked water through its gills. Black, whip-like tentacles swarmed around it like the hairs of a Gorgon beard. And the flesh of the monster was transparent. Cliff could see the throbbing outlines of its vital organs.

Nothing unusual here—just another devil of the depths. So Cliff Rodney would have thought had it not been for certain suggestive impressions that touched lightly on his blurred faculties. That beaked mouth was vacuously empty of expression, but the great limpid orbs were keen. The tentacles clutched a little rod, pointed at one end as a goad would be. The impression was fleeting. With a ripple of finny

members the horror disappeared from view.

"That rod," Cliff muttered aloud, "I wonder if that thing made it!"

He felt a cold twinge, that was an expression of many emotions, ripple over his flesh. He moved quickly, his booted feet sloshing in the water that was now six inches deep within the stout hull of the submarine. He turned a switch; the lights winked out. It was best to be concealed in darkness.

Once more the bathyspheric submarine rocked. Then it was whirled completely over. Cliff Rodney tumbled from the pilot chair. Icy fluid cascaded around him as his body struck the hard steel of the craft's interior.

He managed to protect his head with his arms, but contact with the metal sent a numbing, aching shock through his flesh. Electricity; it could not have been anything else. He tried to curse, but the result was only a ragged gasp. Clinging desperately to the sunset edge of oblivion, he fell back among his instruments.

Impressions were very dim after that. The submarine was being towed somewhere by something. Water continued to pour into the hull, making a confused babble of sound. Rodney lay in the growing pool, the briny stuff bitter on his lips. Too near stunned to master his limbs, he rolled about the inundated floor.

With each eccentric motion of the craft, churning water slapped viciously against his face. He choked and coughed. If only he could keep his nose above the flood and breathe!

In some foggy recess of his mind he wondered why he was fighting for life, when the broken port alone was enough to doom him. Was instinct, or some deeper, more reasoned urge responsible? Cliff did not know, but for a fleeting instant the blank look of pain on his face was punctuated by a grim smile.

He was not the mythical iron man; he was a median of strengths and weaknesses as are most humans. And, among humans, courage is almost as cheap as it is glorious.

Cliff could still hear the swish of great flippers shearing the sea beyond the eighteen-inch shell of the submarine. Harsh to his submerged ears, it was the last impression he received when consciousness faded out.

II.

REAWAKENING was slow agony. He had been half-drowned. When his brain was clear enough for him to take stock of his surroundings he did not immediately note any remarkable change.

He was still within the stout little undersea boat that had brought him to the depths. The vessel was nearly two thirds full of brine, but by luck his body had been thrown over a metal brace, and for part of the time his head had been supported above the flood.

No more water was entering the hull through the eroded crevice in the window. In fact there was no motion at all, and, except for a distant, pulsating hiss, the stillness was tomblike.

The air was heavy and oppressive. It reeked with a fetid stench that was almost unbearable. Mingled with the odor was a faint pungence of chlorine, doubtless brought about by the electrolysis of sea water where it had penetrated some minor fault in the insulation of the submarine's electrical equipment. A gray luminescence seeped through the ports, lighting up the interior of the vessel dimly.

Soaked, dazed, battered, and chilled to the bone, Cliff struggled to the fractured window. There was air beyond it, not water. He had not extinguished the searchlight, and it still burned, for the storage cells that supplied current



had been well protected against mishap.

There was no need to waste power to produce light here. A faint but adequate radiance seemed to come from the curving walls of the chamber in which the submarine had been docked. Cliff switched off the beam.

Groping down under the water, he found a lever and tugged at it. A valve opened, and the brine began to drain out of the submarine. The gurgling sound it made was harsh to his ears. Evidently the atmospheric pressure here was far above normal.

Next, he unfastened the hatch above his head, and hoisted its ponderous weight. Warily he clambered through the opening and dropped down beside his craft.

The room was elliptical, domed, and bare of any furnishings. Its largest diameter was perhaps thirty-five feet, twice the length of the submarine. Puddles dotted the floor, and the walls were beaded with moisture which showed plainly that the place had been flooded recently. At opposite points there had been circular openings in the walls, one much larger than the other. Both were blocked now by great plugs of a translucent, amorphous material.

Cliff had two immediate urges: One was to get a better idea of where he was; the other was to find, if possible, a means of allaying his discomfort.

He started his investigations with the larger of the two plugs. It was held in place by a tough, glutinous cement, still sticky to the touch. From beyond it came a distant murmur of the sea. This, then, was the way by which the submarine had entered the chamber.

After the entrance had been sealed the water had been drawn off by some means through the several drains in the floor. The stream from the valve in the side of the submarine still gurgled into them, pumped away, perhaps, by some hidden mechanism. So much was clear.

CLIFF'S ATTENTION wandered to the walls, in quest of some explanation of the phosphorescence that came from them. Their surface was hard and smooth like that of glass, but the substance that composed them was not glass. It had a peculiar, milky opalescent sheen, like mother-of-pearl. Squinting, he tried to peer through the cloudy, semitransparent material.

At a depth of a few inches little specks of fire flitted. They were tiny, self-luminous marine animals. Beyond the swarming myriads of them was another shell, white and opaque. He understood. The chamber was double-walled. There was water between the walls, and in it those minute light-giving organisms were imprisoned for the purpose of supplying illumination.

It was a simple bit of inventive ingenuity, but not one which men would be likely to make use of. In fact there was nothing about his new surroundings that was not at least subtly different from any similar thing that human beings would produce.

The glass of the domed chamber was not glass. It seemed to be nearer to the substance that composes the inner portion of a mollusk's shell, and yet it had apparently been made in one piece, for there was no visible evidence of joints where separate parts of the dome might have been fastened together. The blocks that sealed the openings in the walls were almost equally strange. Among men they would surely have been made of metal.

Clifford Rodney became more and more aware of the fact that he had come in contact with a civilization and science more fantastic than that of Mars or Venus could ever be. Those planets were worlds of air, as was the Earth he knew, while this was a world of water. Environment here presented handicaps and possibly offered advantages which might well have turned the sea folk's path of advancement in a direction ut-

terly different from that followed by mankind.

Continuing his investigations, Cliff discovered that the air under the dome was admitted through four pipelike tubes which penetrated the double walls of his prison; but, of course, he could not discover where they originated. The air came through those tubes in rhythmic, hissing puffs, and escaped, he supposed, down the drains through which the water had been drawn, since there was no other outlet in evidence.

He wondered how the rancid stuff had been produced, and how his hosts had even known that he needed gaseous oxygen to breathe. He wondered whether they could have any conception of the place whence he had come. To them a land of sunshine must be as ungraspable as a region of the fourth dimension!

He remembered the electric shock that had almost stunned him at the time of his capture. Electricity was produced here then. But how? As yet he had not so much as glimpsed a scrap of metal in his new surroundings.

Cliff shuddered, nor was the dank, bitter cold alone responsible. He could realize clearer than before that beyond the barriers that protected him was a realm of pressure and darkness and water with which his own normal environment had few things in common.

BELATEDLY it occurred to him that he was being watched by the curious of Submarina. Standing now in the center of the slippery floor, he scanned the dome above him for evidence that his logic was correct. It was. Spaced evenly around the arching roof, more than halfway toward its central axis, was a ring of circular areas more transparent than the surrounding texture of the double walls.

Though not easily discernible at a casual glance, they were plain enough to him now. Through each, a pair of

huge, glowing eyes and a Gorgon mass of black tentacles was visible. The ovoid bodies of the creatures were silhouetted against a nebulous luminescence originating from some unknown source beyond them.

The gaze of those monsters seemed cool and interested and intense, though Clifford Rodney felt that one could never be sure of what emotions, if any, their vacuous, beaked lips and limpid eyes betrayed. It would be difficult indeed to forget that they were completely inhuman.

Cliff's reaction was a kind of terror; though the only outward evidences of it were the strained hollows that came suddenly into his cheeks; still, the realization of his position thudded with ghastly weight into his mind. To those sea beings he was doubtless like a simple amoeba beneath a microscope, a specimen to be observed and studied!

Then his sense of humor rescued him. He chuckled half-heartedly through chattering teeth. At least no man had ever before been in a situation quite as novel as this. It was one which a scientist, eager to learn new things, should appreciate. Besides, perhaps now he could bring the adventure to a head.

He waved his arms toward the pairs of eyes that gazed steadily at him. "Hello!" he shouted. "What in the name of good manners are you trying to do to me? Get me out of here!"

They couldn't understand him, but anyway they could see by his gestures that he had discovered them, and that he was insisting on some sort of attention. Cliff Rodney was cold, and half-choked by the rancid air.

Things had to happen soon, or his stamina would be worn down and he would no longer be in a position to see them happen. The dank, frigid chill was the worst. The air would not have been so bad if it had not been for theretch-provoking stench that impregnated

it. If he only had a dry cigarette and a match, it would help a lot.

That was a funny thought—a cigarette and a match! Had he expected these ovoid beings to supply him with such luxuries?

However, since there was no one else to whom he might appeal for help, he continued to shout epithets and pleas, and to flail his arms until he was nearly spent with the effort.

Yet, the sea people gave no evidence of special response. The vital organs throbbed within their transparent bodies, tympanic membranes beneath their beaked mouths vibrated, perhaps transmitting to the water around them signals of a kind of vocal speech, inaudible to him, of course; and their tentacles scurried over the outer surfaces of the spy windows, producing a noise such as a mouse scampering inside a box might make, but Cliff saw no promise in their evident interest.

Every few moments, one pair of eyes would turn away from a window, and another pair would take its place. The ovoids were managing the scrutiny of him just as humans would manage a show featuring a freak. He could imagine them out there waiting in line for a chance to see him. It was funny, but it was ghastly too.

EXHAUSTED, he gave up. Probably they couldn't help him anyway. If he only had something dry to keep the chill away from his shivering flesh!

Hopefully he scrambled up the side of the submarine and lowered himself through the hatch. There was a little electric heater there, but a brief examination of it confirmed his well-founded suspicions. Soaked with brine; its coils were shorted and it refused to work. He had no means of drying it out sufficiently, and so he turned on the search beam. If he crouched against the lamp, he might capture a little heat.

He climbed out of the dripping, disordered interior. Before dropping to the floor of the domed chamber he stood on tiptoe, on the curved back of the submarine and attempted to peer through one of the spy windows in the rotunda over his head.

Even now the mystery of what lay beyond the glowing walls of the room beneath the sea could fascinate him. But his vantage point was not quite high enough, nor was there any easy means to make it higher. He saw only a flicker of soft, greenish light beyond the motionless, ovoid shape that occupied the window.

He slid weakly off the submarine and pressed his body against the lens of the searchlight. The rays warmed him a little—a very little—enough to tantalize him with the thought that such a thing as warmth really existed.

He thought of exercise as a means to start his sluggish blood circulating faster; he even made an effort to put the thought into execution by shaking his arms and stamping his feet. But he felt too far gone to keep up the exertion. His head slumped against the mounting of the searchlight.

Some minutes later, a throbbing radiance caused him to look up. At one of the spy windows was a creature different from the sea people. Its body was flat, and as pallid as a mushroom.

It was shaped curiously like an oak leaf with curled edges. Its mouth was a slit at the anterior extremity of its queer form. On either side of it were pulsing gill openings, and above were beady eyes supported on stalky members. From the thin edges of the creature's body, long, slender filaments projected, glinting like new-drawn copper wire. And the flesh of the thing glowed intermittently like a firefly.

After several seconds this phenomenon ceased, and another far more startling one took its place. The creature

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turned its dorsal surface toward the window.

Then it was as though some invisible hand and brush were printing a message in letters of fire on the pallid hide of the monster. They were old, familiar letters spelling out English words. One by one they appeared, traced with swift and practiced accuracy until the message was complete:

I am far away, man; but I am coming.
I wish to write with you. Do not die yet. Wait until I arrive.

The Student.

If Clifford Rodney had been himself, his consternation at this odd note and the outlandish means of its transmission would have been greater, and his analysis of the phenomena involved would have been more keen. As matters were, he was still able to discern the shadows of the causes underlying the enigma.

This was the subsea version of wireless. He was too tired to construct a theory of its principle; he only glanced at the fine filaments projecting from the body of the creature that had served as an agent of the miracle, and dismissed the vague germ of an idea that had oozed unbidden into his sluggish mind.

Even though this was a science completely inhuman, still it was self-evident that there were logical explanations. At present Cliff didn't care particularly whether he ever learned them. Nor did he ponder for long the riddle of how this distant spokesman of the ovoids was able to write English. Somewhere there must be a simple answer.

HOWEVER, the wording of the message, strikingly demonstrating the broad physical and psychological differences between his kind and the unknowns, won somewhat more attention from him. It was "I wish to write

with you," instead of "I wish to speak with you." The ovoid tympanums, vibrating in water, could not produce or convey to him the sounds of human speech.

"Do not die yet. Wait until I arrive." Did those two simple commands express naïve brutality or—— Cliff scarcely knew how to think the thought. No human being would have expressed an idea of that sort with such guileless frankness. The meaning, of course, was perfectly clear; and Cliff knew that he had been afforded a glimpse into a mind differing radically from those of men.

"The Student." That at least had a familiar aspect. Because of the way the message was signed, the anger and depression which it aroused in him subsided.

The lettering vanished from the flat back of the creature which had been the means of conveying to Cliff Rodney the first expression of subsea thought. Another fire-traced message appeared, letter by letter:

We have waited long for the arrival of one of you, man. We must learn more about your kind before you die. All in our power has been done for you. If you require more, perhaps it is beyond the small sealed exit. Unseal it. Live until I come.

The Student.

Rodney cursed and shook his fist feebly at the messenger. Nevertheless, hope gave him fresh energy. He proceeded to obey the suggestion. Returning to the submarine he procured a heavy knife, extinguished the search beam for economy, and came forth again to attack the smaller door.

The cement here was thoroughly hard, glassy; but tough and elastic rather than brittle. Cliff worked at it fiercely, digging out the gummy stuff with the point of his knife. For a time it seemed that the stubborn block would never yield; but at length, when his expiring energies were all but burned up, and little specks of black-

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ness flitted before his vision, success came.

The plug of amorphous material toppled from the opening and thudded resoundingly to the floor. For a minute young Rodney lay exhausted beside it, a rustle in his ears that he knew was not the distant whisper of the ocean.

Then, rested a bit, he crept through the opening. He was too dazed to be very conscious of the things around him. The character of the chamber was much the same as that of the one he had just quitted, except that it was larger, and the floor was a much more elongated oval. It had the same kind of pearly, phosphorescent dome equipped with spy windows.

Even now the windows were being occupied by the grotesque forms of the sea people, eager to observe the fresh reactions of their strange captive. The air, though, was drier, for the place had not recently been flooded; and it was musty with the odor of ancient decay, like that of a tomb.

THE FLOOR was piled high with a numerous assortment of things—every one of them of human origin. Cliff let his eyes wander over the array. There was a generator, part of a ship's turbine, several life preservers, a fire extinguisher, books, tattered and pulped by sea water and pressure, rugs, and so forth. There were even two human figures.

They were propped on a dilapidated divan, and were fully clothed. Whoever had placed them there had apparently made some attempt to arrange them naturally.

Cliff Rodney came closer to examine them. One had been a man, the other a woman. Their flesh was gone, their faces were only skeleton masks. The woman's dress had once been white and beautiful, but it was just a mottled, gray rag now. Yet, the diamond pend-

ant at her throat still gleamed as brightly as ever. The pair clutched each other with a fierceness that was still apparent. Perhaps they had died in each other's arms like that long ago. A grim tragedy of the Atlantic—

Rodney's reactions were not quite normal. He felt sick. "Damn museum!" he grumbled in a sort of inane disgust. "Damn stinky museum of Davey Jones!" He choked and sneezed.

The haze of his numbed faculties was not so dense that it obscured the animal urge to seek comfort, however. He picked up a heavy rug which, though rotted and odorous, was fairly dry.

He stripped off his soaked garments, and wrapped himself in the rug. Tearing up a book and heaping the fragments into a pile with the intention of making a fire, was quite natural and automatic. So was locating his cigarette lighter and attempting to make it work. Here, though, he struck a snag. Sparks flew, but the wick was too wet to burn.

Out of his angry chagrin an inspiration was born. He unscrewed the cap from the fuel container, poured a few drops of benzine onto the paper, and applied the sparks direct. The tinder flared up merrily, and grotesque shadows leaped about the walls of the eerie chamber. Delighted, Cliff huddled down beside the blaze, absorbing its welcome heat.

Only once did he glance at the ovoids watching him. He could not have guessed what wonder his activities provoked in the minds of those strange people of the depths.

"Go to hell!" He called to them in dismissal.

The air didn't smell so bad with the smoke in it. As the embers began to die, Clifford Rodney drew the carpet tighter about him and sprawled on the pavement. Worn out, he was quickly asleep.

III.

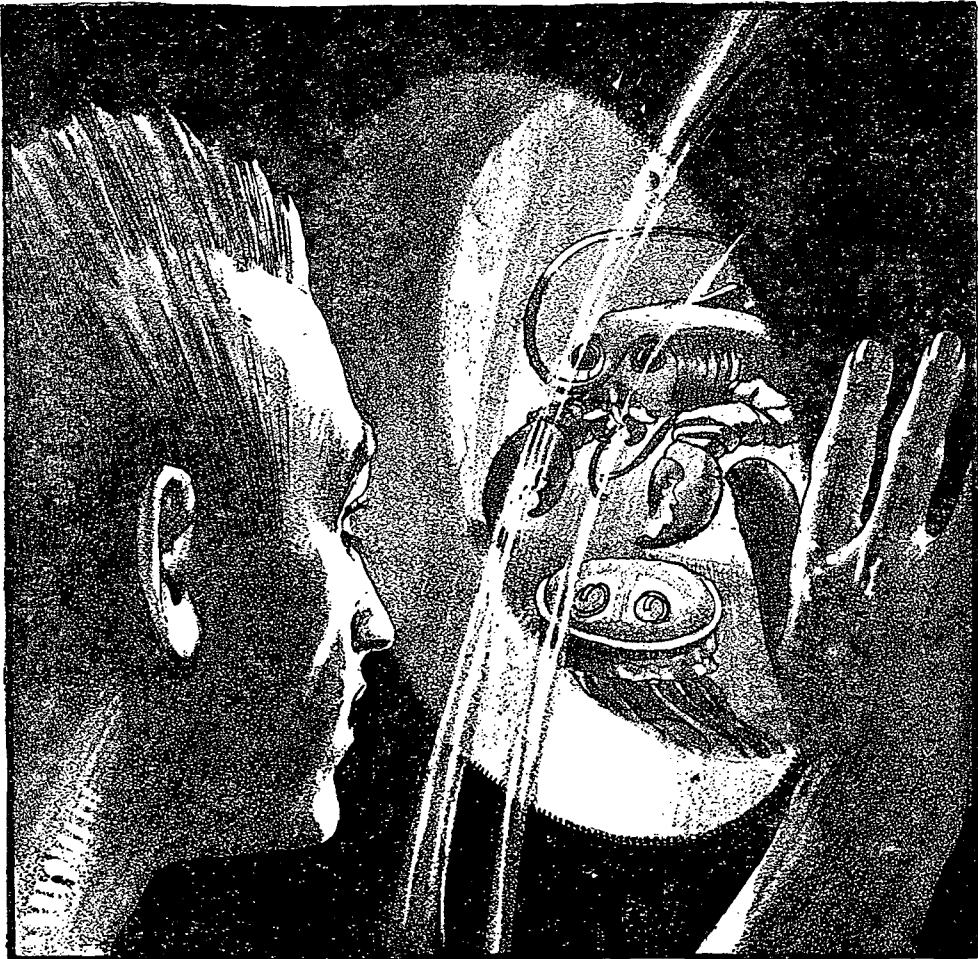
THROUGH the gloom of the bottoms, seven slim shapes were speeding. They were neither crustaceans nor sharklike elasmobranchs; they bore some of the characteristics of both.

Their bodies were protected by horny armor, and were tapered in such a manner as to suggest the lines of a torpedo, a comparison that was heightened by the waspish air of concentrated power about them. Rows of flippers along their flanks churned the dark water, sending them swiftly on their way. Folded carefully against their bellies

were pairs of huge claws resembling the pinchers of a crawfish, though much larger. Projecting like swollen cheeks on either side of their heads were protuberances of modified muscle—their most effective weapons.

These monstrous creations were not entirely the product of nature. The knowledge of a gifted people working on their kind for ages had achieved a miracle, making of them efficient, dependable, fighting machines.

They swam in a military formation. The largest individual of the group formed its center. Above, below,



Like a freak in a museum! That's what I am!" It was funny, ghastly—

ahead, behind, and on either side—one in each position—the others swam. There was a reason. Every now and then schools of small, devil-fanged fish would glide out of the darkness to attack the cavalcade. The nearest members of the escort would leap to meet them.

For an instant, many fierce little teeth would try to penetrate the tough shells of the fighters. Then the latter would strike back, invisibly, except for a momentary flicker of lavender sparks around their snouts. The attacking fish would stiffen and go drifting limply into the darkness again, dead or stunned.

The fighters were protecting their master, he who had named himself "The Student." He rode the central individual of the formation, suckerlike cups on the ventral surface of his body, clinging to its back. He had flattened himself against his mount to minimize the surge of water that swept past him. His eyes peered ahead with an expectant glitter.

He changed position only to trace queer symbols, with a goad of glassy material, on the flesh of the fragile messenger that clung beside him, and to scan the phosphorescent replies to his queries, that came in return. But within him, dread and eagerness were mingled. He had received the call that he had both hoped for and feared. And he was responding.

Out of the murk and ooze that blanketed the sea floor ahead, an emerald glow arose like some infernal dawn. The cavalcade continued to speed on its way, and the radiance brightened.

A broad depression in the bottoms emerged from the fog of suspended mud, gray like tarnished silver. Above it swarmed myriads of minute, luminous animals, forming an immense canopy of green light, limned against the blackness of the depths. That canopy looked

as though it had been placed there for a purpose.

To paint the scene beneath, would have challenged the genius of Gustave Doré. It was as abhorrent as the visions of a mad demon; still it possessed elements of majesty and beauty.

A CITY was there in the hollow—a city or a colony. The seven fighters were moving close above it now. The valley was pitted by countless small openings, arranged edge to edge after the fashion of the cells of a honeycomb. Into them and from them, ovoids swam, going about whatever business was theirs. Here and there, queer structures of a pearly, translucent material, reared twisted spires that seemed to wriggle with the motion of the water.

Monsters were everywhere, vague in the shifting shadows. Scores of types were represented, each type seemingly stranger than its associates. All of the monsters were busy, guided in their activities by alert ovoids that hung in the water, goads poised, flippers stirring idly.

Some of the monsters wallowed in the muck, digging with broad, spatulate members. Wormlike in form, pallid and smooth, one knew that their purpose in life was to dig, and nothing else.

Others kneaded their bloated, shapeless bodies, forming elfin creations around them, seemingly from their own substance. Some fanned the water with long, flattened limbs, perhaps performing a function akin to ventilation. Others—they were fighters like The Student's escort—guarded the colony, swimming steadily back and forth.

And so it went. Each of the horrors followed the vocation for which it was intended. Each was a robot, a machine of living flesh, capable of some special function.

A man would have been held spell-

bound by this teeming, alien activity; but The Student scarcely noticed it at all. Everything—the lights, the motion, the whispering, slithering sounds that found their way to his auditory organs—held the familiarity of life-long experience, of home.

His gaze, though, wandered intently across the valley to the place where the gutted hull of an ocean liner sprawled half over on its side, its form almost obscured by the dusty murk of the depths.

Slim ribbons that had the appearance of vegetation, streamed up from it, waving like banners. They were not vegetation, though they were alive. There were no plants here, away from the sunshine; and the fauna of this world was dependent for its sustenance upon organic debris settling from above, where there was sunlight, where chlorophyll could act, and where both fauna and flora could exist.

Always the wrecks of upper-world ships had interested The Student, as something from another planet would interest us. He had rummaged through their slimy interiors, examining and exploring this and that.

Of all their wondrous contents, books had fascinated him the most. With a zeal and care and love that an archeologist would understand, he had made copies of those fragile, water-soaked storehouses of knowledge, tracing the still legible parts of them on a parchment that could withstand the action of the sea.

He had studied the queer symbol groups they bore; he had discovered the value of the dictionary. And as the Rosetta Stone had been the key to Egyptian hieroglyphics, so the dictionary had been his means of solving the riddle of mankind's literature.

There was another thing that won a brief glance from The Student, as he guided his mount and escort toward the concourse of ovoids that had col-

lected around the structures which housed the reason for his coming.

On a low rise a circular vat, filled with living protoplasm, squatted. Above it two crudely hammered bars of iron converged together. Between their adjacent ends blue sparks purred. The apparatus was a recent development which would have startled the wise inventors who had contributed so much to another culture.

With a thrusting motion The Student hurled himself from the back of the fighter. The flippers along his sides took hold of the water with powerful sweeps. The crowd made a lane for him as he approached. Tympanic voices buzzed around him, questioning, demanding; yet, he paid no heed.

IV.

THE STUDENT reached a spy window in the dome, looked down. The man was there, sprawled motionless amid the relics of his civilization. A piece of ragged fabric wrapped his pallid body.

Revulsion, fear, hope, and anxiety were not beyond The Student's understanding, and he felt them all now.

Was the prisoner dead? Was all that had been promised to end in disappointment? Paradoxically The Student would have been more at ease if such were the case. There is no harm in an enemy whose vital functions have stopped. Yet The Student himself did not live for peace and security alone. The boom of existence has many meanings.

He moved to a window in the smaller dome, and surveyed the bathyspheric submarine, marveling at the smooth, metal hull, and the precise perfection of each detail. No ovoid could fabricate such wonders.

Patiently he waited until the buzzing tympanic voice of the throng about

him impinged on his sense organs, telling him that the time had arrived.

Coolly The Student returned to the window of the museum chamber. The man was awake. He stood unsteadily in the center of the floor, the rug still wrapped around him and his eyes turned upward.

Two peoples, two cultures, two backgrounds, two histories, and two points of view were face to face at last, ready for whatever might come of the meeting. The bizarre stood versus the bizarre from opposite angles. Between them the abyss was wide. Was there—could there be—any sympathy to bridge it?

It was up to The Student to open negotiations, and he did not hesitate, for he had planned well. From a pouch, which was a natural part of him, he removed a stylus of chalky material. Then, concentrating on what he had learned during his years of study, he printed a command on the pane of the window: "You made fire, man. Make it again."

He traced the letters in reverse, so that they would appear normally to the being inside the dome.

The prisoner seemed uncertain for a brief spell; then he obeyed. Paper, a daub of liquid from what appeared to be a tiny black box, a swift movement, sparks, and finally—flame! The man held up the blazing paper for his visitor to see.

The Student watched the phenomenon of rapid oxidation, drinking in the marvel of it until the flame was burned out. The water had washed the chalky letters from the window. He traced another message: "Fire gives you metals, machines, power—everything you have?"

If, before it had happened, Clifford Rodney had had an opportunity to construct a mental picture of what this meeting would be like, he would no doubt have expected to be amazed. But

he could not have conceived beforehand an adequate idea of his own wonder. Tangible truth was so much more startling than a bare thought could be.

Here was a thing which bore many of the outward characteristics of the marine animals with which he was acquainted—pulsing gills, stirring flippers—organs used in a medium which must ever be foreign to those forms of life that live in air and sunshine.

There was even in the visage of the thing—if visage it might be called—a deceptive look of vacuity which only the cool glitter of the great eyes denied. And yet, clutched in the being's tentacles was a crayon, with which it was writing in English, words that displayed a considerable knowledge of human attainments!

CLIFF almost forgot that he himself was a delver after hidden facts. Then his own calm purpose conquered. His sleep had refreshed him; and though he felt stiff, sore, and uncomfortable, he could still respond to the appeal of an enigma.

He looked about for some means to answer. His attention was drawn to a small area of unencumbered floor, on which a thin layer of sea sand had been deposited. With a finger he traced words in it: "Yes. Fire brought us out of the Stone Age, and kept us going since. You got it right, friend. How?"

And the swift-moving tentacles traced a reply: "I have translated books—men's books. I have read of fire. But we have never produced fire. We might produce fire from electric sparks—soon."

Rodney looked with quizzical awe at the gleaming orbs of the ovoid. Behind them, he knew, was a brilliant brain, whose brilliance had perhaps been augmented by the very handicaps which it had faced and overcome. The truth concealed behind this intriguing state-

ment was already dimly formulated in his mind. Now he might clear up the matter completely.

He smoothed out the sand and printed another message: "You have electricity, glass, and a kind of wireless—still, no fire. It is too wet here for fire; but how did you do it all? And you write like a man—how?"

The Student chose to answer the last question first. "I mimic the writing of men," he printed. "I must—so men understand. Glass, electricity, wireless, and other things, come from animals. Nearly everything comes from animals. We have made the animals so. We have developed the useful characteristics of the animals—great care, selection, breeding, crossbreeding—a long time—ages."

It was a confirmation of the vague theory that Cliff had formulated. Handicapped by the impossibility of fire in their normal environment, the sea folk's advancement had followed another path. Controlled evolution was what it amounted to.

Cliff remembered what miracles men such as Luther Burbank had achieved with plants—changing them, improving them. And to a lesser extent, similar marvels had been achieved with animals. Here in the depths of the Atlantic the same science had been used for ages!

Without visible excitement Cliff traced another note in the sand: "Electricity from living flesh, from modified muscle as in the electric eel or the torpedo? Glass from— Tell me!"

And on the spy window the answer appeared: "Yes. Glass from animal—from mollusk—deposited and grown as a mollusk's shell is deposited and grown. And it is formed as we wish. Electricity from modified muscle, as in the electric eel or the torpedo. I have read of them. We have animals like them—but larger. The animals fight for us, kill with electricity. And we

have—electric batteries—metal from the ships. Rods—protoplasm——"

THE STUDENT'S black tentacles switched and hesitated uncertainly as he groped for words that would express his thoughts to this strange monstrosity of another realm.

But Clifford Rodney had captured enough of his meaning to make a guess. "You mean," he wrote, "that you have developed a way of producing a steady current of electricity from a form of living protoplasm? A sort of isolated electric organ with metal details and grids to draw off the power?"

"Yes."

Cliff thought it over, briefly but intensely. Such protoplasm would need only food to keep it active, and it could probably obtain food from the organic dust in the sea water around it.

"Splendid!" he printed. "And the wireless, the radio beast—tell me about it!"

The Student concentrated all his powers on the task of formulating an adequate response. Slowly, hesitantly, now, he began to trace it out; for he was thinking almost in an alien plane, working with words and ideas subtly different from his own. To make the man understand, he had to choose phrases and expressions from the books he had read.

"It is the same," he inscribed. "A characteristic developed to usefulness. Long ago we studied these animals. We discovered that they could—communicate—through—over great distances. We increased—improved this power by—by——"

"By choosing those individuals in which the power was strongest, for breeding purposes, and in turn selecting those of their offspring and the descendants of their offspring in which the characteristics you desired to emphasize were most prominent," Cliff prompted. "Thus the abilities of these

messenger creatures were gradually improved. Right?"

"Yes. Right," The Student printed. "Now, we make marks on the flesh of a messenger creature. The irritation produces stimuli—a sequence of stimuli through nerves of skin, through brain, through—communicating organs. Other creatures, far off, pick up the impulses. Again there is a sequence of stimuli—communicating organs, nerves of skin, luminous cells of skin. The luminous cells which—which—"

Cliff had followed the strange explanation keenly, and now his own quick analytical powers grasped the idea which The Student was trying to express.

"The result is that the luminous cells in the skin of the receiving animals, corresponding in position to the luminous cells in the skin of the transmitting animal, are stimulated so that they emit light. Thus the symbols are made visible on the hide of the receiving messenger, just as they were originally traced. Is that correct?"

"Correct," the ovoid printed.

"There are entomologists who have suggested that certain insects have the power to communicate over distances like that," Cliff answered, "the cockroach, for instance. Their antennæ are supposed to be miniature wireless sets, or something."

The Student did not offer to reply to this immediately, and so Rodney scratched one word in the sand. It was "Wait." For a minute or two he was busy piling odds and ends of wreckage beneath the spy window. Then, equipped with a piece of board, and a pencil taken from his discarded clothing, he scrambled to the top.

V.

FOR THE FIRST TIME, he viewed the colony of the ovoids, the green canopy of luminous organisms,

the hordes of sea people, the welter of infernal activity, the protoplasmic battery sparking on its isolated knoll, the moving shadows of robot beings, and the alert fighters that patrolled the outskirts of the city, where light and darkness met, like enemies holding each other in deadlock.

And the greatest of these miracles was this devil who called himself The Student, and who had now backed off in revulsion at Cliff's approach.

But there were matters still to be investigated more closely. Dimly visible against the outer walls of the dome was a great shapeless mass that expanded and contracted as if it were breathing. Above the thing, and projecting from the dome like a canopy, was a curious curved shell of pearly, vitreous material.

His deductive faculties keyed up, Cliff was almost certain that he understood the function of the arrangement. With his pencil he traced two questions on the board he held: "You know chemistry, physics, what oxygen and nitrogen are?"

"Yes. I have learned from research. I have learned from men's books," The Student replied, conquering his revulsion.

"You know that the air bladders of fish are filled with a mixture of oxygen and nitrogen?" Cliff asked. "You know that these gases are derived from the blood through the capillaries that line the air bladders, and that this oxygen and nitrogen is drawn originally from the oxygen and nitrogen dissolved in sea water, by means of the gills?"

"Yes."

"Then," Rodney went on, "the air in this place comes from animals too! That creature out there under that roof arrangement—it has gills which take the gases from the sea water and deliver them into the blood stream.

"Part of the oxygen is used to keep the creature alive, of course; but another part of it, together with the nitro-

gen, is discharged through the walls of capillaries as an actual, free gas, just as a portion of the oxygen and nitrogen in the blood of a fish is discharged into its hydrostatic organ or air bladder! The roof arrangement probably collects it in some way, and delivers it here to me!"

"That is correct," The Student printed. "Several animals work to give you air. Something new—ages to produce."

"Ages all right," Cliff breathed fervently. "I can well believe it!" He had spoken aloud.

But he was not finished yet. His face was flushed with eagerness, and his pulses were pounding. He had another question to print: "How is the water kept out of here? Nothing of flesh could prevent it from entering when the pressure is so great."

"There our skill failed," The Student responded. "We used the skill of men. We made pumps from parts of ships, and from materials which were our own. Air is pumped into the domes and from the domes—and water, when necessary."

The black tendrils withdrew from the window. Transparent lids flickered over the ovoid's great eyes. The transparent body swayed languorously, reminding Cliff of the first sting ray he had seen in an aquarium when he was a child.

It was clear at last, this alien science. Low down beyond the window, and against the shell of the dome, he glimpsed vague motion, where a monster toiled, swinging the lever of a rusty mechanism back and forth. The machine was a pump. Its operator was forcing to him the air which those other monsters produced. And beyond extended the murky, unbelievable reality of this submarine world.

"It is all glorious," Cliff printed in tribute, "even beautiful, almost—your

achievements, your ways of doing things!"

The Student's tentacles stirred uneasily, but he made no reply.

A CLIMAX had been reached and passed. Rodney's enthusiasm began to cool a little, leaving him to become more cognizant of his own position. He thought of people and friends that he had known, and experiences he had enjoyed. The thoughts made him feel very cold and lonely.

His pencil scratched in the silence. "What are you going to do with me?" he was demanding.

"Keep you," was the response.

"Until I rot?"

"Until you rot."

It was a simple statement, devoid of either malice or compassion. Yet it was loaded with a dread significance. It meant staying here in this awful place, dying of starvation, perhaps, if the icy dankness didn't get him.

It meant death in any event; probably it meant madness. There would be ovoid eyes watching him, studying him; there would be ovoid beaks opening and closing vacuously—crazy, wonderful things everywhere, but only his submarine, and the depressing relics in the museum, familiar!

They had conversed, The Student and he. They had been almost friends. But beneath their apparently amicable attitudes toward each other had lain mistrust, broadened and deepened by the fact that they had so very little in common. Cliff saw it now.

Fury smoldered within him, but he held it in check.

He tossed aside the board, which was too covered with messages to be of any further use, and selected in its stead the pulped remnants of a book from the stack of things which supported him close to the spy window.

On one of the illegible pages he printed a note and held it up for the

ovoid to see: "I know a better way for you to learn about my kind. Why not establish friendly relations with the world above? Certainly we have many things that you could use. And you have many things that we could use."

"No!" The Student's slender, boneless limbs seemed to jerk with emphasis as they traced the word and repeated it. "No!"

"It will happen anyway," Cliff promised. "Soon my people will come in machines of steel. They will make you understand what is best."

"Men coming here will not return," The Student answered.

And Clifford Rodney, remembering his own capture, and seeing now the waspish fighters patrolling the city of the ovoids, had no reason to doubt the weight of the statement. The sea people could protect themselves in their native element.

"You fear us? You mistrust us?" Cliff wanted to know.

The response was frank: "Yes."

"There is no reason."

To this The Student offered nothing. Cliff tried a new angle, printing swiftly: "What do you know of the place we live in, really—sun, stars, planets, day, night? You have read of such things, no doubt. Wouldn't you like to see them? They are beautiful!"

"Beautiful?" The Student questioned. "Beautiful to you. To me—to us—horrible. The sun, the great dazzling light—it is, horrible—and the heat, and the emptiness of air. They make me afraid. But they are wonderful—interesting, very interesting."

Some emotion seemed to stir the nameless soul of the ovoid, making him hesitant and uncertain.

CLIFFORD RODNEY thought he glimpsed a shadow of hope. He scarcely understood why he argued; whether he had some dim idea that he might save himself, or whether he was

trying to advance the cause of mankind in its demand for expansion into alien realms.

Perhaps he was urging this queer intelligence of the deeps only because it is in the nature of any strong, healthy-minded youth to fight even the most adverse circumstance.

"You are interested, but you are afraid," he wrote. "Why don't you give your interest the chance it deserves? Why don't you——" He hesitated, not knowing quite what he wished to say. "Why don't you try to make contact with my people?"

For a flickering instant The Student paused, in a way that betrayed some hidden process within him. Then his decision seemed to come. "The world of men is the world of men," he printed. "The world of the sea is our world."

Further urgings on Cliff's part met only with flat refusal. He desisted at last, feeling oddly like a salesman, who, through a slip in technique, has lost a sale. But that comparison could not be true either. He felt that The Student's obstinacy was too deep-seated to be overcome by mere salesmanship.

Dejectedly he watched the chalky words of the ovoid's last rebuff being washed from the window by the ocean.

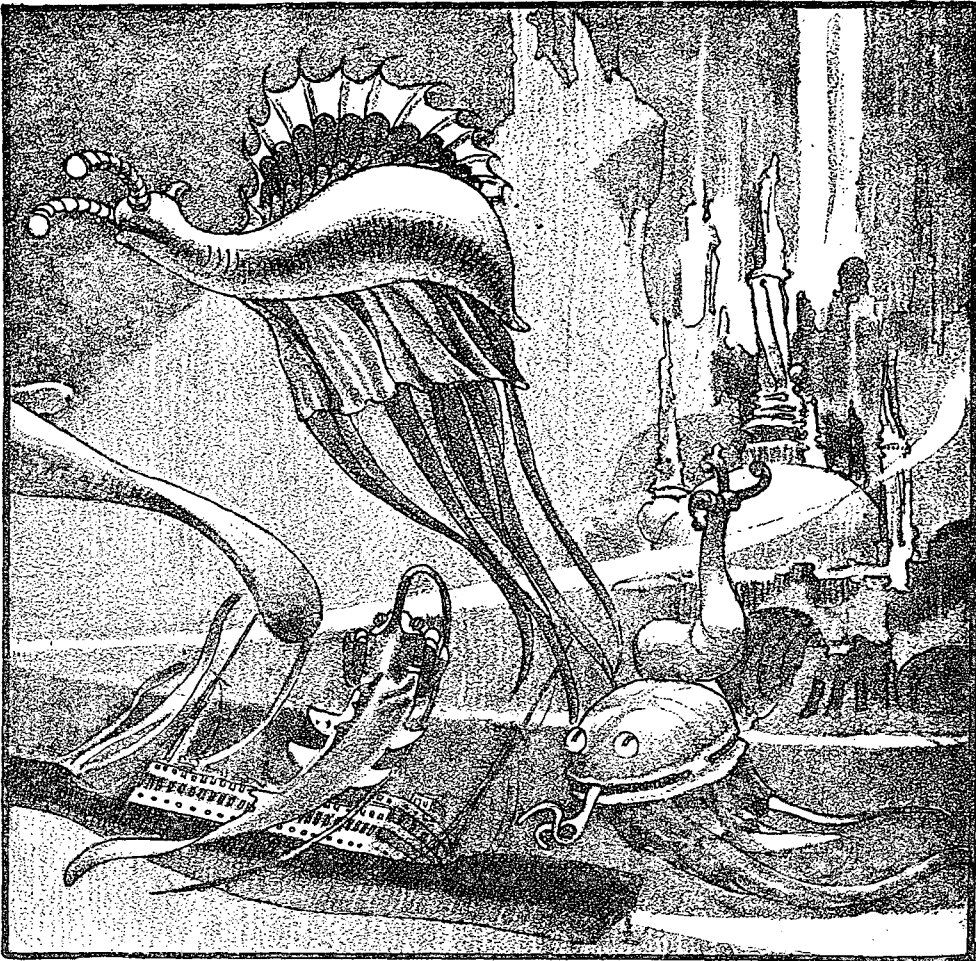
Then those black tendrils holding the crayon went to work once more. "You wish to escape," they printed, "it would be interesting, man, to watch you trying to escape."

Startled, Cliff wondered what bizarre mental process had given birth to these statements. Hope was resurrected.

"I cannot escape," he printed warily. "A glass port of my submarine needs repairing, for one thing. I have no materials."

"We will give you materials," was the astounding assertion.

"Eh?" the man said aloud, before he remembered that the ovoid could not hear his words, or understand them if



It was as abhorrent as the visions of a mad demon—abhorrent and fascinating.

he had been able to. "I could not get out of these domes anyway," he wrote. "It is useless."

Cliff Rodney was trying to make a subtle suggestion, in the hope that his unfathomable jailer would offer him a chance for freedom.

"Men have many tricks," The Student responded. "Watching you make use of tricks will be very interesting. We will learn much. Men have powerful explosives."

"I have no explosives!" Cliff insisted

truthfully. A feeling of exasperation was rising within him.

"Men have many tricks," the ovoid repeated.

It was a tribute, nothing less; a tribute of mingled awe and mistrust, which the people of the depths felt for the people of the upper air. It was an example of other-world minds at work.

"You expect me to escape?" Cliff demanded.

"You will not escape," was the answer. "This is a test of your powers

—a test of men's powers—an experiment. If you escape from the domes you shall be recaptured. We understand caution, man."

Thus Rodney's hopes were broken. But before this message had faded from the spy window, he wrote on a page of the tattered book an acceptance of the challenge: "Good! Get materials you promised, and go to the devil!"

"Materials shall come," was the reply. "Go to the devil."

Breaking off the conversation thus, The Student wheeled in the water. His silvery fins flashed, and he vanished amid the throng of nightmare-watchers.

Cliff wondered in a detached way what emotion, if any, had prompted the ovoid to repeat his angry epithet. Was it fury, amusement, some feeling beyond human conception, or just another bit of mimicry? Cliff didn't know; and because he didn't, the skin at the back of his neck tightened unpleasantly.

VI.

THE STUDENT was out there among his fellows, giving orders in buzzing, tympanic tones, and preparing for the test. None could see the turmoil inside his brain—fear pitted against intense eagerness and interest.

He had made no decisions yet, nor would the decision he had in mind be sanctioned by his people. And it is certain, too, that he had no sympathy for the man who had fallen into his clutches, nor any desire to help him win his way to freedom.

Clifford Rodney did not immediately climb down from his position atop the wreckage he had piled up. Instead he remained by the window, looking out, for no particular reason. The only sound, the gentle, pulsing hiss of air being forced into his prison, had a monotonous effect that was more oppressive than absolute silence.

The weird colony wasn't so very different, though, from the cities at home, if you allowed your eyes to sort of blur out of focus; if you didn't see that sunken liner with the wispy ribbons trailing up from it, or the twisted architecture, or the inhabitants. The moving lights made you think of gay places and of gay music and people. One corner of his mouth drew back thoughtfully.

He could see that his chance of getting out of this mess was practically nil: In the first place, he had not the ghost of an idea how he might escape from the two domes. And if he did manage to break free from them, those armored fighters would bar his way. Their great claws would grip the submarine while they discharged their bolts of electric force. The metal hull would protect him to some extent, but not sufficiently, as he knew from experience.

More conscious than ever of the aches in his body, his loneliness and dejection, he looked down at his feet absently. Under them were books. He toed one. Its gilt title was almost obliterated, but he still could make it out—Kipling's "Barrack Room Ballads."

There was a friendliness in those dim, familiar words, and he chuckled a bit. Funny to think of an ovoid intellect trying to read and understand the poems in that volume—"Danny Deever," "Mandalay"! "If" was one of Kipling's works too: "If you can keep your head—"

Cliff smiled ruefully. Anyway he couldn't go wrong by attempting to improve matters a little.

He cast a final glance through the spy window. The ovoid crowd was growing thicker, anticipating activity. Behind them the fighters were gathering in the dusky shadows. In their claws some of them clutched massive bars of some material—rams, no doubt. Prob-

ably it had been one of those rams that had broken the port of his submarine.

Still garmented in the tattered carpet, he started in by setting his craft in order as best he could; straightening a warped propeller blade, draining water out of machines and instruments, and repairing those that were broken, whenever it was possible. At least, he had cloth and paper from the museum to help him mop up the wetness of everything.

The radio was a tangle, but he had hope of fixing it some way so that, by means of its beam, he could get a word up to the boys aboard the *Etruria*, on the surface. They couldn't help him, of course; they could only watch and wait.

SEVERAL HOURS must have passed without incident. While he worked, Cliff kept a close lookout for some sign of The Student. When it came, it was not delivered by the wizard of the deeps in person, but through the proxy of a messenger beast. The oak-leaf body of the creature wavered before a window, and on its hide luminous words appeared: "Food is coming through an air tube. Eat."

Cliff waited. From one of the air passages that entered the chamber, a mass of albuminous substance was blown, and it plopped to the floor. It looked like white of egg. Cliff touched a finger to it, and tasted the adhering dab.

No doubt it was from the body of some specialized marine animal. Probably it was very nourishing, and though it hardly excited Cliff's appetite, he realized that a man might train himself to relish such fare. At present, however, he preferred the brine-soaked chocolate and other food articles that he had brought with him on his adventure.

The messenger now exhibited another message: "Cement for port of the submarine, through same tube."

Its manner of arrival was similar to that of the food. A great lump of clear, firm jelly, probably also the product of a subsea creature.

Rodney gathered it up. As he carried it, a thin film of the substance hardened to glassy consistency on his hands, as collodion would do. He applied the jelly to the submarine's fractured port, inside and out, pressing it as firmly as he could. It would take some time for the cement to set.

He returned his attention to the radio transmitter, but only for a moment. Out of some inner well of his consciousness, the faint shadow of an idea had appeared.

He clambered from the submarine, and with a knife proceeded to dig the cement from around the huge, glassy plug that kept out the sea, just as he had done before with the smaller plug that had sealed the entrance dome from the museum.

He worked entirely around the circular mass, loosening the adhesive substance as deeply as he could probe with his blade. No seepage of sea water appeared. The great block was intended to open outwardly. It was very thick, and beyond it, holding it shut, was the weight of the Atlantic.

But Clifford Rodney's plan was maturing. His efforts were not entirely useless. Undoubtedly that external door was not as firmly placed as it had previously been.

Cliff felt that he might yet demonstrate his ability to get out of the domes, though once beyond them, he could find no glimmer of reason to expect that he could elude the circle of horror that awaited him, even for a few seconds. He could only try to do his best, not so much in the expectation of escape, but to keep his energies busy.

CONSCIOUS that his every move was watched with absorbing interest by the ovoid audience at the spy windows,

he rummaged in the museum, finding there some wire and strips of metal. These he brought back beside the submarine.

The drinking-water container of his craft was glass-lined. He unfastened it from its mounting, bashed in the top, and added to its contents a small amount of acid from his batteries. Then he carried it up through the hatch and set it on the floor of the chamber.

Into the water, at opposite sides of the container, he placed upright strips of metal to act as electrodes. To each of these he fastened wires, and attached their opposite ends to the powerful storage batteries of the submarine.

Next, with paper and other refuse, he plugged the air tubes and drains of the two domes. Then he closed the switch, sending current through the apparatus he had just constructed.

There was a hiss as of a caldron boiling as the electricity went through the water in the container, splitting it up into the elemental gases that composed it. Free oxygen and hydrogen bubbled away from the electrodes, mixing with the air of the domes.

This crude process of electrolysis was only the beginning. From the museum Cliff collected all the combustible materials he could find, and carried them into the chamber of the submarine—books, wood, a few scraps of celluloid, hard rubber, and so forth. Then, with a little of the glassy cement that remained, he sealed the block that had separated the two domes, back into place.

There was another matter. For a few seconds it puzzled him, but finally a solution came. With wrenches he unbolted the heavy glass lens of the submarine's searchlight. Carefully he tapped the incandescent bulb beneath, breaking it, but leaving the delicate tungsten filaments undamaged. Against them he placed a wad of paper, daubed

with the remaining benzine of his cigarette lighter.

So far, so good. He investigated the electrolysis apparatus again, shutting off the current for a moment while he scraped away the interfering bubbles that had collected on the crude electrodes.

Satisfied that his preparations were as complete as they could be made for the present, he shut himself inside the submarine and continued to work on the radio. After perhaps an hour of fussing and tampering, he believed that he might get a code message up to the *Etruria*.

He was almost ready, but there was one thing more. Aboard the craft there were ten flasks of compressed oxygen. Opening the valves of nine of these, he tossed them through the hatch, retaining only one for breathing purposes.

While their contents soured away he disconnected the electrolysis wires and closed the heavy steel door over his head. Working the key of the radio, he flashed out his appeal:

Rodney calling S. S. *Etruria*. . . .
Rodney calling S. S. *Etruria*. . . . Cap-
tured by deep-sea creatures. . . . Try-
ing to escape. . . . Get position and
stand by to help. . . ."

He repeated the communication several times. If it were received, it would be simple for his confreres to calculate his position from the direction the waves came in. They'd be waiting to pick him up. He even chuckled ruefully at the thought.

Through the ports he could see that the ovoids had moved back from the spy windows of the dome, anticipating danger; but their forms, and the forms of their fighters still hovered tensely in the luminescent haze of the ocean bed. He could not see many from his unfavorable position, but doubtless they were above and all around the dome, waiting for him to make a move!

VII.

CLIFF forced himself to forget these unnerving thoughts. His hand touched the searchlight switch. His face was grim as he directed his gaze through another port toward the great, circular block that kept out the sea.

"Any one of three things can happen," he muttered: "The force can be insufficient, in which case what I have done won't accomplish anything at all—I'll still be locked in this dome. Or it can be too great, forcing out that plug all at once and letting the water in here all at once, to smash this steel coffin—all at once. Or it can be just right, admitting the ocean gradually enough so that this old tub can stand the strain."

Even the stout steel hull couldn't withstand the sudden thrust of the pressure of the deeps, he knew. Its position would be something like that of a nut under the blow of a hammer.

Cliff didn't want to give himself time to think. He closed the switch. Almost immediately there was a flash of red, as the hot filaments of the searchlight ignited the benzine-soaked paper that was in contact with them.

The flame spread through the dome in a wave of orange, as the hydrogen in the air burned. The sound which penetrated the thick shell of the craft was not the concussion of an explosion. Rather, it was a whispering, soughing roar; for the weight of the sea without was too vast for this feeble beginning of chemical forces to combat.

However, the reserves now came into action. Immersed in a highly oxygenated atmosphere under pressure, the paraphernalia from the museum took fire, and, though damp, rapidly became an inferno of incandescence that threw off enormous volumes of gas, expanding irresistibly with heat.

His heart thumping, Rodney kept his

eyes glued to the great block which he hoped to dislodge. Stubbornly it continued to stand its ground, unmoved. He gritted his teeth as if, by sheer force of will, he sought to move the insensate thing that barred his way.

Moments passed. There was a snap like a muffled rifle shot. The block jerked, shuddered. Around its rim a curtain of glass appeared—no—not glass—water, screaming like a concourse of mad devils. The flood rolled over the floor, found the fire, and burst into steam, the pressure of which added to the titanic forces combating the titanic weight of the deeps.

More moments—the chamber was half full of water. Then, with a sort of majestic resignation, the plug yielded, folding outward like a dying colossus. The ocean was in then, swiftly—so swiftly that a living eye could not capture its movements. The thud of it was heavier than a clap of thunder.

The submarine bobbed in the maelstrom like a bit of flotsam. But its hull held, even though it was flung repeatedly against the walls of the dome.

A minute went by before Clifford Rodney was able to do anything. He picked himself up from the place where he had been hurled, and scrambled to the controls. He could see the opening which led from his prison. The motors throbbed and the submarine turned, heading through the still surging water.

IT DID get clear of the dome. Cliff almost thought he had a chance. Maybe the confusion produced in the vicinity by the suction when the sea had entered the dome, had unnerved the ovoids momentarily.

He set the vertical screws spinning. Their lift wasn't very good. They had been damaged again. It was hardly remarkable after the way the little ship had been bounced around.

Cliff looked up through a ceiling port.

Six fighters were pouncing down upon him, their hinged claws spread wide, their long, armored forms ghostly in the shadows. Others were approaching from all directions, accompanied by a horde of ovoids.

A seventh had joined the six now. Rodney had not seen it dart up from the deep muck of the bottoms, where it had lain, hidden even to the people of the depths. It bore a strange, glassy object of considerable size. Without much attention the man wondered what it might be.

"All right," he muttered, "you win! I hope you enjoyed the show!"

The fighters were upon him. He could hear the scrape of their claws against metal. Clouds of black stuff, like the ink of a squid, surrounded the submarine, hiding everything from view. He was still rising though—rather rapidly, he thought. In a moment the electric bolts would stun him.

Upward and upward he went. Cliff began to be puzzled. He detected scraping noises that he could not interpret. He must have advanced half a mile toward the surface since the start. It was all very odd.

There was a jolt. The climb became halting and erratic. The motors labored doggedly.

The water cleared. Cliff could make out schools of phosphorescent fish, hanging in the darkness like scattered galaxies. He was alone, far above the bottoms. There were no fighters around him, though he thought he glimpsed dim shapes vanishing beneath. They could not endure the reduced pressure that existed here.

Matters were better, far better, than he had dared to expect—mysteriously so. Now if the vertical screws continued to function at all— The submarine appeared to be badly damaged. It seemed clumsy, heavy.

Cliff came into a region of deep bluish-light, beautiful as some fairy-peo-

pled realm of infinity. Not long thereafter the bathyspheric craft broke through the sunlit surface of the Atlantic. Cliff opened the valves of a pressure tank, inflating the bellows like water wings which supported the heavy submarine when it was on the surface.

How had this all happened? There was still the mystery. He almost forgot that he must gradually reduce the pressure around him, to avoid the "bends."

At length he opened the hatch and crawled out onto the rounded top of the undersea boat. An egg-shaped object was fastened to the metal shell just behind the hatch. Rodney approached it, unable yet to fathom its nature. Glassy cement, like that with which he had recently become acquainted, held the thing in place.

It was a massive object, six feet through at its greatest diameter. It was made of the same material as the domes, except that this substance was darker, perhaps to shield what it covered from the fierce sun.

RODNEY peered into the semi-transparent depths of the object, discerning there a huddled form enveloped in a milky, semiliquid film. The form was delicate; vital organs pulsed visibly beneath its skin. It had flippers, and masses of black tendrils. Its beaked mouth opened and closed, giving it an air of vacuous solemnity, but its eyes were keen. Its tentacles clutched a white crayon. It was The Student!

Clifford Rodney's mind was a whirl as he sought to solve the riddle. Then, since no other means of printing a message was available, he traced words with a finger on the wet surface of the oval object:

"You helped me—how?"

The Student's tendrils trembled as he printed the answer on the inside of his protecting shell: "I helped you. The six fighters, and the seventh, were

AST-2

mine. They did not attack you. Concealed by the liquid that darkens the sea, they raised your submarine upward.

"They attached me to the submarine. They raised it as far as they could climb. It was a trick to outwit my people. They forbid traffic with the upper world. They are afraid. I was afraid, but at last I chose. While you prepared for the test an idea came. I used it, outwitting my people. I am afraid. But I am glad."

Rodney was lost in the fantastic wonder of it all. "Thank you, my friend!" he printed

The Student plied his crayon again: "Friend? No. I am not your friend. What I did, I did for myself."

"Then why in reason's name are you here?" Cliff printed. "Men will put you in an aquarium, and stare at and study you!"

"Good," was the response, "I am glad. Men study me. I study them. Good. That is why I came: to see the accomplishments of men, to see the stars, to see the planets. Now I see the sun and sky—dreadful but interesting—very interesting. Good."

"Good if you don't smother before you can be transferred to a suitable aquarium," Rodney traced.

"I am safe here," the ovoid answered

with a nervous flurry of tendrils. "The pressure is normal. There is much oxygen in the fluid which surrounds me. But do what you must, man. I am waiting"

Cliff was accustomed enough to the situation by now to grin down at the great dark egg. Mixed with his awe there was a curious inner warmth. Man and ovoid were different in form and mind; perhaps real sympathy between them was impossible. But Cliff had found a tangible similarity.

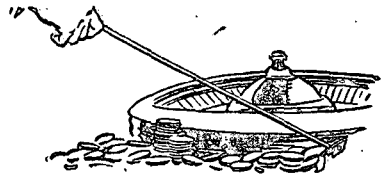
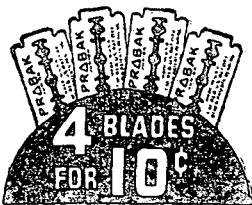
In this sullen devil of the depths eagerness to know the unknown had battled fear, and had won. The Student had placed himself, without defense, in the power of the unknown. It took guts to do that, courage—

Young Rodney thought of many things as he looked out over the water in search of signs of rescue. A ship was approaching. It was near enough so that he could recognize it as the *Etruria*.

"The boys'll probably call you Davey Jones' ambassador or something," he said banteringly, addressing the ovoid. "I hope you're sport enough to take it, old socks!"

But The Student wouldn't have listened even if he were able. His eyes were drinking in the miracle of the approaching ship.

*You take
a chance*



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NOVA SOLIS

*A glance at history yet to be written—when
the world is old and men are desperate*

by E. V. Raymond

THE TIME had passed now: Two thousand years measured by the slow deterioration of a speck of radium smaller than the head of a pin. More than half its atoms had lost their radioactivity, becoming atoms of inert lead.

Through the centuries the guardian instruments had kept watch, noting with perfect precision the gradual wane of the emanations. So much decrease in the activity of the radium meant so many hours gone by. The moment had come now for the instruments to fulfill their purpose. Soullessly they proceeded.

Relays clicked. In response, lights burned in the buried vault, where there had been no light in two millennia. Like prodded monsters from a dead past, heavier mechanisms throbbed and moved, breaking the ancient stillness.

Pumps sucked dense, life-suspending vapors from the interiors of the three hundred black boxes that lined the subterranean hall. Oxygen, rich and vivifying, was forced into the sealed caskets of the sleepers. Static electricity played over their bodies, stimulating long-discontinued functions back toward normalcy. Hearts began to beat; lungs began to breathe, and minds merged slowly toward consciousness, taking up the faded threads of existences that had escaped not only their natural end, but the end of life on Earth.

Brad Keyston was among the first to realize that he lived. It was a curious sensation like that of emerging

from nowhere, without a past, without a purpose, and without an understanding of anything, for his memory was rusty and retarded.

Thick darkness was around him, and he was lying on a soft, spongy material. His hands grouped out like a babe's, and touched cold barriers close to his body. He heard sounds which he could not yet interpret.

His brow puckered in puzzlement, and he began to fight the veil that blurred his faculties. Bit by bit his memory was resurrected, not coherently at first, but in disordered though vivid fragments that resembled the jangled impressions of delirium.

Fear and dread— The year, 1957— A great, unheralded cloud from space, darkening the Sun at first— Cold. Then heat, growing and growing inexorably. Meteors flashing in the sky. The old superstition about meteors and death. The Sun gone crazy—exploding— Nature in anger, terribly grand, arousing in feeble human emotions the tumult of doom. Other suns had burst out wildly like that. There had been Nova Herculis back in '35—

Brad saw in his mind's eye smoldering plains which once had been verdant, cities in chaos, and human faces contorted with terror and beaded with sweat. He heard in the same fashion the scream and rattle and thud of a civilization crumbling under the radiations of a star that had run amuck.

And like a man half aroused from a



*He remembered it now—superstition of meteors and death—
the sun gone crazy—*

nightmare, he mistook those events he remembered for present reality. Words and names and phrases that belonged to that merciless time two thousand years ago, burst from his dry lips:

"Dr. Heth! We're finished unless we hurry! Hibernite! The vault! Our only chance—— Maysie! Maysie girl! Are you all right? Are——"

His hoarse words were flung back deafeningly into his ears by the casket

lid, close to his face. The sound jarred his snarled thoughts into a sane pattern. He knew now where he was, and why he was there. Trembling with relief, he relaxed. The first phase of the adventure was over. He could see all its details clearly at last.

THE ARRIVAL of the cloud of meteoric refuse from interstellar space had been the initial incident. Drawn

by the tremendous solar gravity, the innumerable billions of tons of cosmic dust and stones had fallen toward the Sun, stoking its fires until they had raged with a fierceness far above normal. Vast tongues of flame had jetted from the photosphere, until they had almost touched the orbit of Mercury. Solar prominences, they were, exaggerated enormously, shooting spaceward at velocities of many miles per second.

The cloud of cosmic debris had screened off much of the unnatural radiant energy in the beginning; but the Sun was swiftly absorbing that cloud. The end of things had become apparent. The process of slow roasting had already commenced; many savants had predicted other, more spectacular developments.

They had seen that Sol was now comparable to an overheated boiler: Internal, subatomic processes, provoked by the deluge of meteors, were responsible. Might not the Sun burst out with a fury beside which its present madness would seem feeble? It would be a true nova then—an exploding star which, at a later date, would lapse back into a much less violent condition.

In any case humankind had apparently reached its ultimate calamity. Brad and his associate, the pessimistic Dr. Heth, had found the only possible means of survival—the gaseous drug, hibernite.

Enlisting the loyal employees of their little company, Heth & Keyston Chemicals, they had drilled a tube seven miles into the crust of the Earth. With new tools they had blasted out vaults at its bottom; they had collected supplies; they had constructed their apparatus, shielding everything with stout fire walls.

There had been enough hibernite to save only three hundred people for the doubtful future. About equal numbers of men and women were in the employ

of Heth & Keyston Chemicals. They almost filled the roster. The others had been selected from the few refugees that had managed to make their way at night across the hot plains to the scene of operations.

Brad had been among the last to descend into the subterranean chambers. He had taken a final look at the Sun through a plate of darkened quartz. With a slow majesty it had seemed to swell, and to lose its spherical form, becoming a great, irregular blotch of intolerable incandescence. Predictions had proved true. *Nova Solis*.

Yes, Brad Keyston remembered the facts.

Now he groped through the gloom with unsteady fingers, locating a small metal wheel. He wrenched it savagely. Unlatched, the counterpoised lid of the compartment folded upward, admitting the light of electric bulbs. Weakly he raised his gaunt, hard form from the casket and dropped to the floor.

Perhaps twenty of his companions had already deserted their metal cocoons, and stood here and there, uncertain what to do. There were both men and women in the group, clad alike in silvery garments of metallic fabric. Factory hands, chemists, stenographers—this was the stock that hoped to re-people a world.

Their faces were pale and haggard, their bodies were thinner than usual; for though their vital processes had ceased during the sleep, and no tissue had been consumed to furnish food for active cells, still much of the water in their systems had evaporated.

Keyston heard a dry voice whispering close to his ear: "Will we be all right now, Brad? Will we be able to start over up there on the surface? Will it be cool enough for us to live?"

HE TURNED. Behind him was Roger Leeds, his wife's brother. There was concern written in the youth's

wasted features, concern which might easily be mistaken for fear. He was a serious-minded kid, always seeking to know the circumstances next to be faced, and to prepare for them. He felt, as all the others must, the grueling uncertainty of their position.

Because Roger's question spelled the difference between survival and extinction, and because he knew the probabilities, Brad was slightly irritated. Yet he controlled his irritation.

"Dunno, Roger," he remarked hoarsely. "We'll see."

Brad's eyes sought the casket in which his wife had sealed herself. The lid was still down. Panic rising within him, Brad staggered toward the compartment, but before he could reach it the cover arose abruptly. Maysie was wan but smiling. In a moment he felt the reassuring caress of her yellow curls against his weathered cheek.

"You did right that time, Keyston!" some one announced loudly and confidently from the other end of the hall. "Always expect the worst! It saves disappointments!"

Even though the voice was parched as ashes, they didn't need to look up to know that it was Dr. Elias Heth who spoke.

There he was, a bit pale now, where his face showed above an immense black beard that would have made Sennacherib envious. But his jovial eyes were twinkling.

"It's old Killjoy!" Maysie burst out.

"Killjoy? Oh, no! Not me!" Heth asserted as he approached them. "I just believe in facing the facts, and then being joyful in spite of them. The idea is a lot better than trying to fool yourself and not succeeding!"

With a sort of half-truculent, half-ludicrous bearishness the bewhiskered savant glanced about him. Most of the compartments had disgorged their occupants, and those few that still remained

closed were clanging open in twos and threes every second.

"Most of us are awake, I see," Heth remarked. "Fine! This is an important event. A speech is required, and I like to make speeches. It won't be long, because my throat is dry and my breath is short."

Heth paused, then flung his hand out in a gesture of facetious grandiloquence. "My friends," he orated, "we have come through twenty centuries just for the privilege of meeting a special and exclusive kind of death. Every one of you, including our leader, Bradford Keyston, knows the facts; but only I am willing to state them boldly. We have, stored in these vaults, sufficient food and other essentials to last a year—enough time for us to plant and raise mythical crops which we won't be able to raise. We have equipment to free oxygen from its compounds, and we have the means to filter and purify water. We are even supplied with chemicals that can reduce hardened lava, changing it to fertile soil.

"All our preparations, however, are useless. Any scientist worthy of the name can state, sight unseen, the conditions which now prevail on the surface of our planet. The period during which the solar nova lasted must have been a matter of at least several months. During that time the normal intensity of the Sun's radiations was multiplied by many thousands. The exploding photosphere, incredibly hot though tenuous, must actually have bathed the crust of our world for a considerable period, fusing the rocks and soil to a depth of a mile at least.

"The Earth survived because it was too solid to be destroyed by a barrage of rarefied gases, yet it is certainly unfit to be inhabited by protoplasmic organisms to-day. Two thousand years is nothing in the life of a planet. Ages would be required to lose all the heat that was absorbed during the reign of

Nova Solis. Earth now is a hell of volcanic forces such as existed at the very dawn of things, long before life appeared. Its ground is only half solid; its atmosphere is polluted by noxious gases. Possibly the Sun has almost burned itself out after its mighty spree.

"If there were not a definite limit to the period of time during which a human system can endure the influence of hibernite, we might have remained dormant until conditions were again favorable to our reception. But that was, of course, impossible. Nor would we dare enter the sleep a second time for several months, even if we had the materials from which to manufacture a fresh supply of hibernite."

THE DOCTOR'S tone and manner had changed imperceptibly. Starting in facetious lightness, it had grown more and more serious. Now it became light again:

"We're doomed," he went on. "But we've a year in which to enjoy ourselves, to study, to learn, to sing and dance and make love in an entirely novel environment! We're lucky. The rest of the race missed this glorious vacation. Now let's fill ourselves comfortably with food and water before Brad suggests ascending to the surface for a look-around!"

As he finished there was a heavy hush among his listeners.

Maysie broke it. "Eat, drink and be merry; and all the rest of it!" she cried with a reckless gayety.

Responding partly to her mood and partly to Heth's paradoxically jovial pessimism the three hundred survivors awoke echoes in the metal vault with their cheers and clapping.

"You may be right, old Killjoy," Brad Keyston commented in the same spirit. "Still, there's going to be a lot of work done within the next year. We're going to try hard to hang onto this mortal plane anyway!"

"Splendid!" said Elias Heth, his voice curiously unsteady.

They ate from the stored rations, hermetically sealed and kept fresh through the centuries. They drew drinking water from great glass tanks. Some chatted and laughed hopefully; others conversed in hushed tones. A few tried to sing. Elias Heth produced a fiddle and played the rollicking tunes of a culture that had passed. And after a while they all slept a little.

Brad Keyston, however, allowed himself a nap of only a few minutes before he began inspecting the elevator. Three motor-driven gears, set at evenly spaced points around the circumference of the little car, were arranged so as to engage three cogged tracks along the sides of the surface tube, and could thus lift the vehicle toward the upper world.

Everything seemed in order. Satisfied, Brad donned a doped asbestos garment, and inspected two similar garments and their oxygen helmets.

Roger Leeds was the only other person who was awake. Keyston winked at the boy meaningly, and then grinned down at Maysie where she lay huddled on the floor asleep. He rumbled her blond curls to arouse her.

"Come along, you two," he invited. "This is our chance to beat the others in a tour of inspection!"

The tiny elevator, operating in a tube scarcely more than a yard in diameter, could accommodate but three passengers. Tools and explosives were packed into its upper compartments.

Under Roger's guidance it began to ascend swiftly. The tube extended, dimly lighted by small neon bulbs, above.

The first five miles of the climb were made without incident. But above the point thus reached the thermometers registered a swift and ominous rise. The lusterless gray alloy from which the tube was made, stout and almost

infusible, protected against heat by every device known to science, still had been warped in many places. During the period of noval activity the tube must have been surrounded here by seething, incandescent lava.

With grave misgivings the passengers waited. Three hundred feet below ground, the car refused to go farther. The tracks were so twisted the driving gears were jammed. It would be necessary to ascend the rest of the way by means of the ladder along the sides of the tube. Through thick darkness, for the neon bulbs did not work here, the adventurers raised themselves, lighting the way with flashlights.

Presently they reached the exit chamber, just beneath the surface. The stillness was hot and black. The rotunda, firmly buttressed, shielded by multiple vacuum compartments and layers of asbestos, still had bulged downward dangerously.

NO ONE SPOKE. Driven by feverish unrest they did the things that had to be done. Cutting tools whirled in their gauntleted hands, biting into twisted plates of a compound which only the best electric furnaces could have melted. Thus a warped trapdoor was pried open. Into the dark tunnel beyond, Brad thrust a cylinder of explosive. After setting the time fuse, he and his companions returned back into the tube.

A few minutes later they were digging their way through broken, smoldering rock. Yellow daylight streamed in upon them. Like grotesque imps from a nether region, they scrambled up through the pit which the explosive had blasted in the surface crust of the Earth.

With mixed feelings of awe, wonder and dread, they looked about them, knowing that this was the moment during which their future would be revealed.

Low in the west the Sun was shining. It was not a very different Sun from that which had been familiar during the old peaceful days. It was a trifle larger, perhaps, but otherwise it was the same. It was evident that after the noval outburst it had contracted rapidly, incorporating the substance of the huge meteoric cloud into its mass.

Perhaps the cloud had been the means of saving it from the near extinction of stars that burst out madly. Had the cause of the noval activity been entirely internal, providing no means of replacing destroyed matter, Sol's condition might have been different. But now it was such a Sun as might have burned above the primeval, azoic Earth.

Around it, along the horizon, hung heavy clouds, black-centered, yellow-fringed, ominous and majestic as volcanic palls. A murky haze of steam veiled everything, and through its lazily shifting layers loomed grotesque buttes of rocks, harsh and jagged and grand as something torn from the vitals of creation. A great, sleepy lava pit in the near distance sent up slim pencilings of smoke. The ground all about exuded a steamy vapor.

Brad Keyston felt an unpleasant warmth seeping through the vacuum compartments of his soles. He saw the ghostly threads of noxious volcanic gas wreathing about his helmet.

Roger Leeds had taken a little thermostat from a pocket in the asbestos garment he wore. Brad and Maysie heard his voice croaking thickly in the radiophones over their ears.

"A hundred and thirty-four degrees Centigrade!" he pronounced. "The air is heated thirty-four degrees above the boiling point of water!"

They all knew the truth now.

Maysie's pert little chin trembled behind the glazed front of her oxygen helmet. Yet she smiled. "Old Killjoy ought to be tickled to death about this," she said. "I suppose we ought to send

the good news from Ghent to Aix at once."

Brad laughed. "The bad news from Gehenna to Hades, did you say? Soon, but there's no need to hurry about flattering Dr. Heth. Let's look around a bit first."

THE SUN had sunk into the sulphurous clouds. Dusk began to settle. The three outlandishly clad humans picked their way with deft caution through the smoldering débris beneath their feet, as they wandered aimlessly about the pit.

Lightning flashed on the heavy horizon. Thunder grumbled. Through a gap in the cloud bank two great stars gleamed. Perhaps one was Venus, if Venus still existed. The other looked brighter, as if it blazed with an incandescence of its own. Maybe it was a new planet, shot from the body of the exploding Sun.

As the darkness deepened, a white glow illuminated the eastern sky, as if, somewhere beyond the serrated grandeur of the hills, a vast lake of white flame burned.

A whispering vibration found its way through the helmets of the three adventurers. Swiftly it grew louder. Something was coming out of that eastern glow, something strange and outré that blazed like molten magnesium behind a shell of glass. It was long and slim, shaped like a zeppelin, and it was flying swiftly westward at an altitude of several thousand feet.

But it was nothing that man could have made. It seemed unsubstantial, as if it were fabricated from an ethereal plasma, lying on the border line between matter and energy.

With mounting velocity it hurtled nearer, climbing steadily into the darkening yellow haze of the sky. It was like a great, elongated bubble, whose flexible integument seemed fuzzy and vague, as if it had no definite surface.

Behind the veiling, unsubstantial enigma of its shell, shapes moved, as if motivated by reasonable purposes which, however, were beyond the grasp of humankind. They burned a dazzling white behind the blurred film that incased them. Their forms were irregular, amoebal, and they thrust out and withdrew threadlike pseudopods of luminous gas.

Only a brief glimpse the adventurers had of these incomprehensible mysteries. Then the thing in which they rode had thundered overhead and had begun to diminish into the leprous, unhealthy colors of the sunset. Ascending steadily, it became a minute speck that appeared to vanish into the depths of space itself.

When it was gone, three whitened faces exchanged awed looks.

"Was that a machine?" Maysie stammered. "A machine made of something that isn't truly solid—isn't a—a substance at all?"

Brad Keyston was conscious that his muscles had tightened defensively. "Maybe," he stated in a level tone that betrayed his efforts to control himself.

"Then they're alive!" Roger burst out. "They're thinking beings. But they're not like us! They are a different order of life entirely. But where did they come from? Or did some evolutionary process produce them here after the nova subsided? In two thousand years? That's too short a time!"

Keyston tried to shrug nonchalantly; but for the present, in the face of this new marvel, he had forgotten even the plight of himself and his people in this alien inferno.

"We'll find out what we can," he said with forced calm. "We'll phone down to the vaults for help. A plane will have to be hoisted up here and assembled; and we will need to rig up some sort of a landing platform." He nodded toward the east where the white glow, hinting of unimaginable things,

still blazed in the sulphurous dusk. "Then we'll be able to fly over there and see what is causing *that* anyway," he added.

A few moments later they had made their way back into the surface chamber from which they had so recently emerged. Brad spoke with Dr. Heth over the telephone, telling him what they had seen and what they wanted.

"It all sounds far too intriguing to be true," Heth replied with his usual pessimism. "Conditions up there must be pretty bad to make you imagine such wonders. But I suppose we shall have to humor you until we find out definitely that you are insane."

The elevator was kept busy for many hours while it hoisted workers and supplies to the surface.

People who had once enjoyed routine existences as employees of Heth & Keyston Chemicals, donned fantastic attire and slaved at tasks about which, in that other peaceful time, they had never even dreamed.

THE infernal night wore on. A gusty, steam-laden wind tore out of the southwest, shrieking a devil's tune. Hot rain from the cooler regions of the sky tumbled down, to vaporize with a hiss as it struck the sizzling crust of the Earth. Lightning blazed, revealing a hell of distorted crags and hills. Thunder crashed. Through rifts in the ragged clouds the Moon shone now and then.

It was a different Moon from that of olden times, for the same cataclysmic forces which had transformed the Earth had transformed its satellite. Luna's surface features had changed, and around her clung the halo of an atmosphere, which had perhaps been baked out of the substance of her crust.

"The old Moon's had its face lifted!" a pert, red-headed little stenographer who was one of several women that

had insisted on coming to the surface, commented gleefully.

In spite of their handicaps the workers toiled on, arranging plates of metal over the hardening lava to serve as a landing platform. When dawn came, red and threatening, the plane was assembled and ready for flight.

Dr. Heth took the controls. The rocket tubes sent back their propulsive streams with powerful thrusts, lifting the craft quickly from the ground. Heth circled, wigwagging the wings in a salute to the goblin figures of the people on the landing platform.

Maysie, Roger and Brad were with him. They stared intently forward and down as he sent the ship hurtling eastward. There beyond the steam-wrapped crags and hollows, the auroral glow still blazed mysteriously.

It was only a short hop to the scene of the enigma which they sought to penetrate—twenty miles, perhaps.

Beneath them now was a broad plain which seemed to have been artificially smoothed. Seven structures, arranged to form a geometric cluster, had been erected on its glassy floor. All were alike. They were huge, circular fabrications, a half mile across. Their roofs were very low, and were formed like flattened domes. They were made of the same strange, ethereal, transparent plasma as the aircraft that had flown westward the evening before. It could be seen that each structure was divided radially into triangular compartments, after the fashion of the sections of an orange.

All but one of the buildings looked deserted and lonely. A single, wedge-shaped compartment of one of the structures was filled with a blotchy mass of incandescence. It was from this that the glow, seen from a distance, had originated. Specks of flame swarmed and writhed within it. The rest of the great flattened dome was dark.

For several minutes Heth guided the

plane back and forth above the fantastic citadel or camp. His companions felt the soul-tweaking thrill of uncertainty. Were they in danger? They did not know. The doctor's caution was instinctive.

At the base of the dome, where the lighted compartment touched the outer wall, a curious phenomenon was taking place. A huge blister or bubble seemed to be forming. Rapidly its misty substance swelled, as fiery, amoebal forms forced their way into it. The process took many minutes. Then, with a sudden jerk, the thing detached itself from the dome and arose, balloonlike into the air. In a matter of seconds it elongated, becoming a zeppelin-shaped aircraft.

"They're coming up to attack us!" Maysie cried.

It was not so, however. The thing came close as it ascended skyward—close enough for the occupants of the plane to capture a clear, photographic glimpse of the entities inside the energy bubble.

The sentient blobs of incandescence moved around and around within the confines of their plasmic envelope, like dust motes swirling in a vortex, or like men working a treadmill.

Perhaps this second comparison was not too far-fetched to have points of fact. What man, viewing this demonstration of an utterly alien science, could say that these marvelous unknowns were not propelling their weird vehicle by means of an energy derived from their own bodies? Before the thought had a chance to form in the minds of the observers, the dazzling craft had flashed eastward to vanish into the glare of the morning Sun.

"I'm going down to see what this is all about!" Heth announced with a grimness that was quite unlike his usual self. His attitude suggested a bewildered but determined bear.

Below, white flame belched from the opening in the side of the dome, whence

the huge bubble had emerged. Within the triangular compartment the glow was fading, as if it were no longer needed. The other deserted compartments seemed like creations of mist, fuzzy and vague, and almost perfectly transparent.

Without thought of danger, Dr. Heth brought the rocket ship to rest on the hard, glassy ground on which the dome city had been built.

THE ADVENTURERS hurried toward the structure which had so recently been evacuated. The blast of escaping flame held them back.

The bearded scientist looked in helpless questioning at his younger colleague. "The temperature of the gas inside that compartment must be at least four thousand degrees Centigrade!" he cried.

"How could anything alive withstand such heat?" Maysie demanded.

Brad Keyston was bewildered, yet from out of his bewilderment he captured a thread of understanding. Eagerly he pounced upon it, seeking to broaden his first vague inspiration.

"Those beings do not belong to Earth," he stated quietly. "Let us say that they came to our planet to escape cataclysmic conditions which broke out in their native habitat. Earth began to cool once more. They could not stand the cooling, for they needed heat. So they built these fire domes in which to live. Now conditions are again favorable on their native sphere, so they have gone home."

"What are you talking about?" Heth asked in brusque puzzlement.

"Remember that their first craft went west at dusk, and that this other went east at dawn?" Brad reminded him. "They were headed for the Sun—headed for home."

"But nothing could live in the temperatures that exist on the Sun!" Heth protested. "Protoplasm——"

"Who said anything about protoplasm?" Keyston demanded. "Obviously those things aren't composed of protoplasm. Superheated gas, they must be, functioning through the agency of forces and processes about which we know very little. Atomic energy; disorganized electrons and protons. It's what we would have called impossible once because our experience wasn't broad enough. But it's true. You saw that it was true!"

Gradually the facts soaked into befuddled minds. Life even on the Sun. Intelligence, science; invention; comforts, fears, aspirations. Incredible but true—

"Splendid deduction, Brad," Roger Leeds said calmly. "But maybe there is another fact that is more interesting to us from a personal angle. Come along!"

The three followed him. He led them around the dome to an opening from which another space ship must have departed. But there was no escaping flame here. Without hesitation Roger entered the vaporous doorway. The others came after him.

They were in a vast, triangular compartment, through the sides and roof of which, Sunlight sifted. The floor was misty and vague, yet it supported their weight like a great mat of live rubber. And here, at close quarters, it

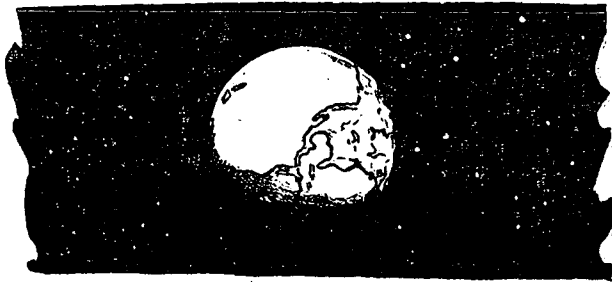
glowed and sparkled with myriad prismatic hues. What the strange plasma from which the dome was constructed might be, no man could guess with any certainty; for it was the product of another science. Perhaps it was some form of crystallized energy, dim and diaphanous, yet permanent as the rocks of Earth itself.

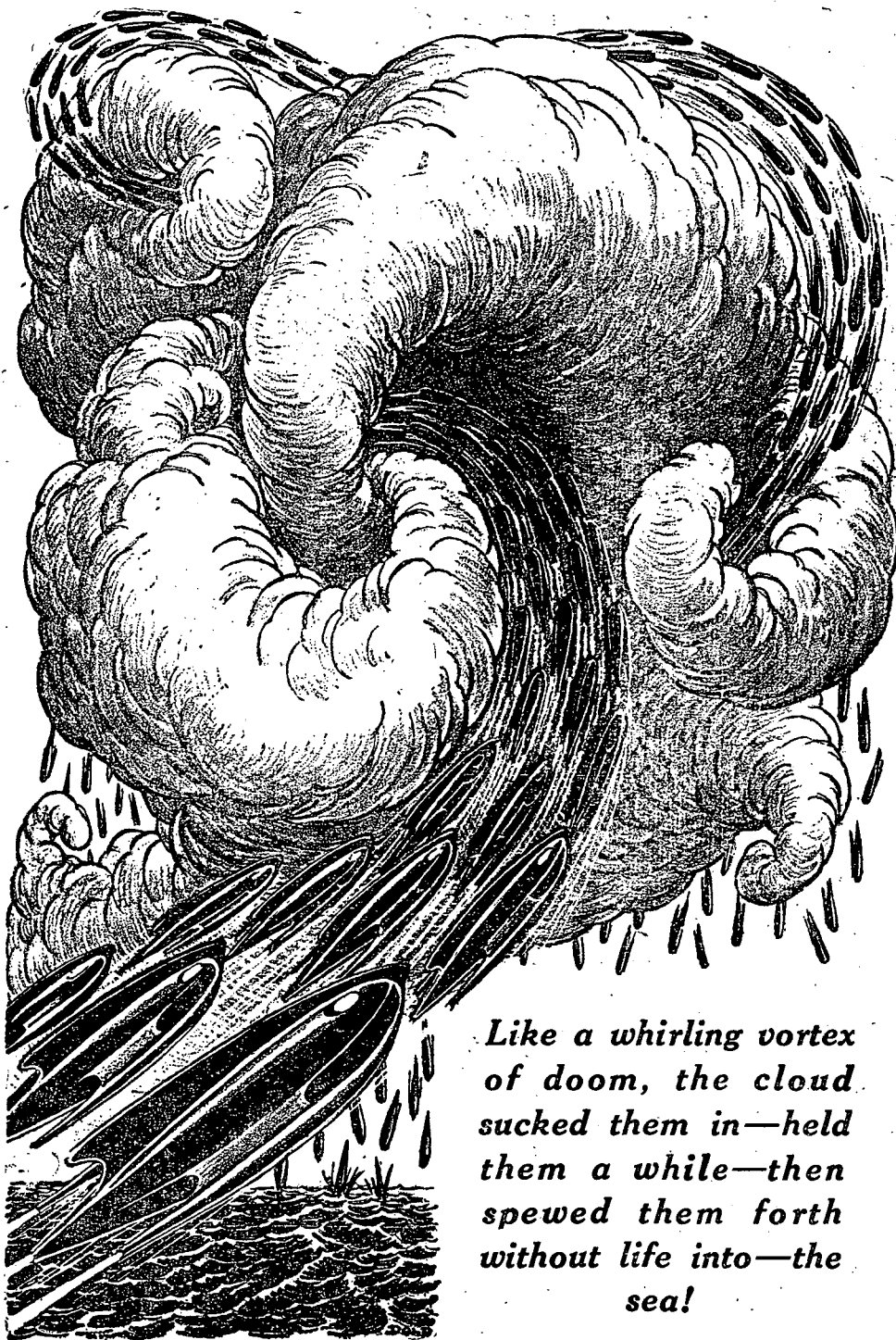
Roger consulted his pocket thermostat. "One hundred and thirty-four degrees outside; one hundred and twenty-five here. Nine degrees cooler," he pronounced. Then he touched the wall. It gave a little, like rubber.

"The perfect insulator," he said. "It kept the heat the Sun people needed, in; and it should keep the heat we don't need out. We have the chemicals to make soil out of lava. We have tractors, we have air purifiers. We can bring our soil here, seal the entrance, cool the atmosphere with liquefied oxygen, plant our crops—and live! There probably are many other deserted dome cities throughout the world, if we need them."

His audience stared at him for a long moment. Then the curious, hard calm which Maysie had maintained since the awakening, collapsed, and she leaned on Brad's shoulder and sobbed with relief.

The bewhiskered Heth swore thickly. He seemed more than ever like a lost and doubtful bear. But in his eyes there was an ecstatic light.





*Like a whirling vortex
of doom, the cloud
sucked them in—held
them a while—then
spewed them forth
without life into—the
sea!*

The Green Doom

*Death, riding in a cloud—unnamed—
carrying a force unknown—unguessed*

by Richard Tooker

THE WORLD-WIDE aerial conflict involving all the great nations and threatening the very foundations of civilization during the years 1970 and 1976 provided an epic background for the unprecedented catastrophes of Dr. Boris Marloff's ill-starred career.

On the fifteenth of September, 1976, when the age-long supremacy of the Aryan nations tottered before the thundering rocketeer legions of the Asian Alliance, Dr. Marloff's calm, scholarly voice and grave, bearded visage were heard and seen in the television receivers of Bernard Gerard, U. S. Commissioner of War. Commissioner Gerard was briefly informed that an epochal discovery in bacteriology by the Marloff experimental laboratories would enable the United States and the western coalition to end the disastrous war and name their own terms for peace with the Asian Alliance.

Commissioner Gerard received the news with elation and impatiently awaited further word from the isolated Marloff laboratory on the banks of the Mississippi River. Three days of suspense passed for the war department without further communications from the renowned American savant, while all attempts to reestablish television connection with Dr. Marloff failed.

Commissioner Gerard waited a week longer for a confirmation that did not come and then dispatched a secret-service detail to investigate the doctor's strange silence.

On September 28th the lieutenant colonel in charge of the special detail reported in summary as follows:

We tarmacked at the Marloff laboratory on the morning of the 26th and found the grounds apparently deserted. Dr. Marloff's tritubed rocketeer was missing and the laboratory ransacked. Almost all equipment had been removed. As far as we could ascertain, no indication was left to explain the departure of the doctor and his two assistants, and an extensive inquiry among the nearest residential sectors availed nothing. Foul play, perhaps espionage, is suspected, but no conclusive proof can be advanced at this date.

The incident closed in mystery after a fruitless investigation by the war department.

Dr. Marloff's disappearance had been crowded out of the television news broads by a disastrous defeat of the Coalition in a clash of rocketeer dreadnaughts over the Bering Sea when a startling communication reached the war department from a station, or rocketeer in flight, of unlisted frequency, and without connection being made with the visualizer. The message was brief, the voice strained, yet recognizable as that of Dr. Marloff. The message was recorded as follows:

Divert all facilities available to the manufacture of air-tight, radium-text armor, similar to high altitude armor in design and equipped with oxygen storage tanks. Every inhabitant of the western hemisphere is in peril of his life unless so equipped for emergency. These armors must be donned at the first notification

of a green vapor or cloud in the sky. Circumstances are such that no further explanation can be made.

Commissioner Gerard's comment after a vain attempt to trace this perplexing and disturbing message was—"The man must be mad. There isn't enough radium in the world to make ten thousand such armors!"

After further unsuccessful efforts to locate Dr. Marloff, the message was dismissed in the regrettable conclusion that the doctor had suddenly gone insane.

It was but shortly after this second communication from Dr. Marloff when the department of game conservation entered in its records several reports from various Midwestern localities of an unusual epidemic among wild rabbits. The animals were found dead by scores in some areas, their carcasses mere shells of dry tissues and bones, which frequently disintegrated upon being disturbed. Though no significant associations were suspected, oddly similar fatalities occurred among agrarians in rather widely separated districts, as well as motor freightists on the government highways. Further, an unusual number of rocketeers were reported wrecked throughout the Middle West, the remains of pilots and passengers being found oddly emaciated and brittle as if the last ounce of fluid matter had been drained from veins and tissues.

LATE IN OCTOBER of that year a rocketeer pilot en route to St. Louis for a weekly air carnival observed a dense, greenish cloud hovering high in the north. This first witness of the horrible "green doom," as it was later popularly called, was Lieutenant Halvor Bransom, home on brief leave from the 76th Bomber Squadron to which he was attached. His fiancée, Stella Rhodes, accompanied him.

The lieutenant called back through the speaking tube to his companion, re-

marking the oddly ominous appearance of the green cloud. Miss Rhodes believed it to be a cyclone, but Lieutenant Bransom could not see the similarity. His first impression was of a freakish reflection of sun rays, but with a premonition of danger he decided to land for observations rather than risk being caught in any dangerous air currents that might accompany the menacing thunderhead of vapor.

Lieutenant Bransom set down his light rocketeer in a level meadow, between irrigated fields, at a point about twenty miles south of St. Louis. He and his fiancée got out to watch in awed mystification the strange, dense, somewhat lifelike vapor mass, now obviously descending upon the city of St. Louis as if drawn down by an enormous vacuum in the lower atmospheric strata.

Bransom informed his companion that he believed the cloud might be an enemy gas attack, some new invention for the destruction of inland cities. Immediately he attempted to communicate with St. Louis air defenses by means of the small transmitter with which his ship was equipped. But he experienced unexpected difficulty in dialing local frequency owing to unusually strong static.

Stella Rhodes' cry of fear brought the young officer out of the cabin to meet a terrified young woman fleeing to his arms for protection from a peril she could not understand, but instinctively sensed. Looking northward, with his fiancée clasped in his arms, Lieutenant Bransom saw that the vast, green cloud had reached the earth, its nadir and lower, undulating, feelerlike edges hidden by intervening land swells. Like some monster bird of prey settled upon its nest, the verdigris-green phantasm of the skies glowed and shimmered with a strange, internal agitation, as if living beings were hurrying to and fro with torches through a fog.

Lieutenant Bransom was as fright-

ened as his bride-to-be at the sinister aspect of the cloud that enshrouded St. Louis, but he retained the presence of mind to return to the cabin of his ship and televize Chicago's air patrols. No sooner had he sent his message when the receivers of his private set began to crackle with emergency signals. All connection with St. Louis had been suddenly cut off. The whole Middle West had been startled and baffled by static interference in the St. Louis area, and in less than twenty minutes emergency details were rocketing toward the threatened inland city.

Lieutenant Bransom and Stella Rhodes reported later that the cloud remained over the city but a few minutes before it suddenly lifted, ascending with incredible velocity. Yet during the brief contact with the earth's surface the vapor masses had expanded tremendously. Only the swiftness of ascent could account for the fact that seconds later the mass of vapor was but a speck in the northwestern zenith.

Not half an hour later detachments of aerial police from neighboring cities landed on the outskirts of St. Louis, where the crews disembarked for investigations. Proceeding with caution, detonator pistols ready for enemy hostilities, the police were puzzled that no signs of damage were at first discernible. All the buildings stood apparently unharmed, with no dust or odor of high explosives or gas in the air.

Yet a ghastly surprise awaited them as they came upon the first scattered bodies of the slain, lying in all manner of positions on the strangely silent streets. There was every indication of a panic just before the lethal power had struck. Hundreds of dead were counted as the patrols proceeded into the heart of the desolate city. Some bodies were mere scarecrow effigies of sprawled clothing, with brittle husks of skin and bones inside. Others, examined more thoroughly by the horrified

investigators, crumpled to ashy heaps of mummified flesh before their eyes.

As reports of the disaster circulated through the television news broads, the world was stunned by the incredible slaughter of innocents. But though the Asian Alliance was accused of the wanton massacre, there were no clues to incriminate them. Nevertheless, while the Asian minister of war coolly denied that his powers had been responsible for the St. Louis disaster, he prepared to take advantage of the crushing blow to the Aryan cause by launching a great aerial offensive.

Meanwhile, the only actually official report of the disaster that was in any way enlightening originated in the testimony of Lieutenant Halvor Bransom and his bride-to-be, Stella Rhodes. A few agrarians, living in their little cities of socialized agricultural units, had seen the cloud, but had thought it a tornado.

A WEEK PASSED. The nation recovered slowly from the shock of the St. Louis disaster, the worst of its kind in history. Scouting rocketeers vainly combed the skies for a trace of the deadly green vapor, while theories as to its origin thronged from scientists and the press. And then again the television networks awoke to lightning signals of distress. The great city of Chicago had sighted the cloud, hovering far above, beginning its incredibly rapid descent upon millions of helpless human prey.

Patrol details sped toward the new zone of danger. Police rocketeers attacked the cloud with pyradine detonators and incendiary rays. But the gallant ships plunged by scores to earth, their crews and pilots dead long before they crashed. Over each ship that had attacked, a monstrous streamer of green mist had passed, like a gigantic amoeba's pseudopod. When the arm drew back into the vast nucleus an unmanned ship plunged earthward to destruction.

The Chicago disaster was followed by panic in all the large cities. Thousands of refugees poured out of the previously certain security of the armored residential sectors, seeking safety in the forest reserves and irrigated tracts of the countryside. But news of the second catastrophe had reached the Asian Alliance through their espionage system and strategical mass offensive in planning after the St. Louis disaster was immediately precipitated at apparently the psychological moment. Desperately, the western coalition mustered its demoralized legions to meet the onslaught of a known foe. And then an ironical fate intervened.

High above the Atlantic Ocean, a few hundred miles from New York Harbor, the green cloud suddenly descended upon the squadrons of the Asian rocketeer armada. Resistance was useless. The batteries of detonators, deadly to solids, exploded harmlessly in the green cloud. Eighteen thousand gas bombers and straffing planes plunged to a watery grave in a space of minutes before the green cloud, now estimated to be several miles in circumference and nearly a mile in depth, soared away again to an altitude far beyond that attainable by the lightest rocketeers.

On that day the war ended. A truce was hastily signed between the warring factions—a truce that would enable the powers of the world to defend themselves against a common foe.

While fleets of rocketeer destroyers circled the skies over all the large cities of the North American continent, on watch for the vapor menace, Commissioner Gerard reclaimed from his files the message from Dr. Boris Marloff. A special order was quietly disseminated for all factories suitably equipped to concentrate on the manufacture of radium-tex, armored suits, similar in design to the altitude armors, while every laboratory was solemnly enjoined to pro-

duce every ounce of radium that could possibly be recovered. All broadcasting gave way at intervals to calls for Dr. Marloff, and during the third interval of world-wide radial silence a message came. It remains in the files of the war department as follows:

Radium-tex armors are your only security. I am doing all that man can do. For the sake of humanity's future do not attempt to find me or interrupt my work.
Marloff.

The day after the doctor's third significant communication, the green cloud settled over New Orleans, and a third great tomb remained for the marvel and horror of the earth.

A few crews were now being equipped with radium-tex altitude armors for investigation of the cloud, yet it was almost impossible to locate the vapor at will even from the highest altitudes attainable by specially constructed rocket craft. And during the fourth attack, on Nashville, Tennessee, the radium-tex armored patrols gained nothing by immune penetration of the vapor. All explosives and ray destroyers were ineffective, and three specially armored chemists lost their lives in attempts to secure samples of the vapor. In some way the deadly mists had penetrated their defenses.

Day by day, during rioting and world-wide terror never before equaled, the green cloud struck and vanished. Seven cities were left denuded of all human life. Buenos Aires of the Argentine Republics fell, then Berlin of the Germanic States. London, New York City, Leningrad, Paris and Rome were virtually deserted by terrorized residents. But the evacuation of the cities was arrested when a caravan of several thousand refugees, fleeing the centers of densest population through the government forests in the North American Piedmont Region, was overtaken and consumed by the cloud. After that, men

AST-3

gave up in despair, awaiting their appointed hours in millennial demolition.

Doctors, physicists, chemists, bacteriologists—all were helpless to give aid. Thus far no man had lived to obtain a sample of the green vapor for experiment, and as no traces of it were left in the victims, scientists were wholly at loss for experimental resources.

On November 26th the cloud was last seen over Norfolk, Virginia, following a trail of destruction that led halfway around the world, leaving eighty millions dead in its wake. And then, for an un conjecturable reason, the depredations abruptly ceased. After two weeks of suspense the demonstrations of a demoralized mankind subsided and humanity began to hope, dimly at first, stronger as days passed and no further disasters were reported, nor the green cloud sighted by scouting patrols.

EARLY on the night of December 1st, an aerial patrol detail sighted a magnesium air buoy burning some four hundred odd miles off the coast of Virginia. Cautiously approaching, the colonel in charge examined the buoy, which rode slowly in circles over one spot—driven by a tiny propeller from its radioactive energy.

Attached to the buoy was a cylinder of radium-permeated alloy on which had been graven with an electric needle these simple directions:

"For the commissioner of war."

The cylinder was delivered to Commissioner Gerard an hour later and when opened was found to contain a written message on thin sheets of metal leaf impregnated with radium salts. It was the story of Dr. Boris Marloff. A few minutes after the message had been read Commissioner Gerard directed that these tidings be broadcast throughout the world:

"God has acted through man. The green doom is no more."

AST-4

The manuscript which the commissioner received was later published in entirety by television broadcast. It is quoted here in full:

To my fellow men and the commissioner of war:

On October 15th you received a televised message from me stating that I had discovered, in behalf of the western coalition, a means of ending not only the war with the Asian Alliance, but all wars for all time. This was theoretically true. It is my subsequent silence that I must here explain.

Three days after that message was transmitted from my laboratory on the banks of the Mississippi I found that I had spoken too soon. I could not control the agency I had created.

A word as to the formula is necessary in full explanation, though the secret of its creation now have been utterly and fortunately lost to mankind.

As you know, my specialty has been bacteriology. It was through the fusion of various deadly bacteria that I hoped to discover an unconquerable weapon of war. Success came when I hit upon the hybridization of a malignant cancer germ, recently isolated, with the flying spores of a little known species of fungi. The result was an incomputable multiplication of microscopic, self-propulsive bacteria in the form of a dense, green vapor. Using as food the blood of rabbits and I must confess small quantities of my own blood and that of my assistants, I developed these masses of bacteria to possess a carnivorous, insatiable appetite for body fluids homogeneous with the blood of man and his hemotological relatives such as rabbits.

The largest of these deadly bacterial swarms I kept imprisoned in a huge radium-permeated globe, fed by body juices introduced through annealed ducts. It was during the feeding of this largest swarm that the terrible accident

occurred. Not knowing the true potentiality of my discovery, I injected too much food fluid. The billions of multiplying bacteria, expanding with unsuspected force, exerted such pressure on the walls of the globe as to burst it into fragments. My assistants and I escaped from the laboratory, and through an open window the green swarm from the shattered container also escaped.

Recovering from the first numbing shock of a horror that was to grow upon me as I more fully appreciated what I had done, I realized that all mankind was in unprecedented danger. There seemed but one recourse—to cultivate some agency that would destroy the pestilence I had loosed upon an unsuspecting world. There was no time to be lost in public explanations, nor could I risk the wrath of the masses when the green swarm made itself hideously known as it fed and amplified upon the human blood and lymph I had trained it to crave.

In my rocketeer the *Colophon* I moved all laboratory equipment and the few smaller serous samples of the green swarm to an abandoned house in the Ozark Mountains, which, as we know, have been almost deserted since the elimination of poverty from our economic system. Here I set to work with my two faithful assistants, Gregory Winston and Frank Ferrand.

By television we learned the first rumors—for that was all they were at first—of the green swarm's depredations. It was feeding upon wild rabbits and occasional, isolated human victims, growing and multiplying continually as only malignant bacteria can grow and multiply. At an altitude far above that attainable by human rocket propulsion, the masses of bacteria drifted about until they reached the periodical hunger or propagation stage, when they immediately intensified; that is, the vaporlike masses grew more compact, and then swooped

down upon the nearest and largest aggregation of living matter.

We had but one known tenet of defense to begin with—that a radium-permeated substance could certainly repel the devouring swarms. This information I immediately televised to the commissioner of war on a wave length that could not be traced. That message will be on record as a lunatic's attempt to frighten the war department into wholesale manufacture of radium-tex armor. Of course I dared not explain why at the time.

Meanwhile, my assistants and I labored day and night in an attempt to cultivate a reactive parasite or disease that would attack the swarms of minute flying spores comprising the green cloud and destroy them. I had little hope of success, yet I felt that I alone had even a chance in a million of discovering an antitoxin or reagent, since I alone understood the nature of the green vapor and had specimens of it safely confined for experiment.

We labored in constant danger of death, as only the millions of mankind who have fallen could testify if they were alive to-day.

If the discovery of the green swarm was extraordinary, the eventual cultivation of an antitoxin seemed to us no less than a divine miracle, since all the races of man as well as homogeneously blooded creatures were doomed if we failed. Yet we did at last discover this antitoxin in the form of a disease, a parasitical disease, which paralyzed the motive powers of the flying spores and completely stupefied the malignant cancer germs which entered the pores of living beings and absorbed all body fluids.

However, as is frequently the case, the cure was in some respects worse than the malady itself. My privately conducted tests revealed that infection from the green swarm's antitoxin was not only deadly to man but virulently contagious in a form somewhat similar

to an acute leprosy. Nevertheless, we were almost sure to become infected and die before we could make use of the miracle vouchsafed us.

ON NOVEMBER 27th we set out in the *Collophon* with a large torpedo charged with the parasitical bacteria. Each of us wore a radium-tex armor, two suits of which we had taken from the bodies of government scouts, the other having been manufactured from the radium in our stores.

We sighted the cloud over the Atlantic Ocean a few hundred miles off Norfolk, Virginia, where it had last been reported. The swarm was evidently preparing to descend upon the seaport city. Plunging into its midst, we released the torpedo of antitoxin.

The effect was almost instantaneous. The green swarm became chaotically agitated, ceased to ascend, and before our eyes began to thin and disseminate. Within an hour it had faded from view as the cell clusters were broken up and the dead spores fell into the open sea by billions.

My assistants were overcome with joy at our success, but I observed on the hand of one a dark stain which I knew to signify infection by the parasite with which we had destroyed the green swarm. The other reported a numbing sensation in one of his feet. I also experienced similar symptoms of the virulent disease spread by the exploding torpedo, but I dared say nothing definite of what I privately knew to be our fate. Without a doubt we all three were inoculated with the parasite and doomed to die a lingering death even more terrible than that resulting from contact with the green swarm—unless we voluntarily speeded the process by suicide.

Acting with the highest motives in view, I cut the current of our television set and locked myself in my private

cabin, informing my assistants that we could not return to land with the good tidings until we were certain the last vestiges of the swarm had been destroyed. This was an expedient falsehood of course. The facts were that we dared not even televize any one for fear they would rocket near us and become inoculated with the plague, and to return to our fellows in our condition would be equivalent to race suicide.

It is while locked in my cabin that I have written the above narrative of our experiences while the *Collophon* cruises in circles above the ocean. When finished I shall enclose the record in a sealed, radium sterilized cylinder, which will be attached to an automatic suspension buoy with magnesium flare, similarly sterilized. It is beyond conception that any germs can remain in an active state on the buoy or in the cylinder. I trust that the buoy will be located before its energy is expended, since explanations are in order as to the origin of the green swarm—explanations which I hope will prove a sufficient warning to future experimenters in bacteriology.

I go to my death in the conviction that if I have erred greatly, I have given all in vindication of that error. My left arm is almost entirely paralyzed, the flesh sloughing away in brown flakes. I can hear my assistants complaining in the other compartments of the ship. No doubt they have suspected what is wrong. Loyal comrades, faithful men! I wish it were in my power to save them, but they must follow me to the bottom of the sea lest the human race suffer an untimely doom more frightful than the vampire greed of the green swarm.

There is a torpedo beside me. A moment after I release this message on the buoy, and it is safely distant from the ship, I will close the detonating switch. Forgive and forget—

Boris Marloff.



"Get out! Beat it! Scram!" he shouted at the giggling, gibbering creatures—

IDIOTS!" howled Grant Calthorpe. "Fools—nitwits—imbeciles!" He sought wildly for some more expressive terms, failed, and vented his exasperation in a vicious kick at the pile of rubbish on the ground.

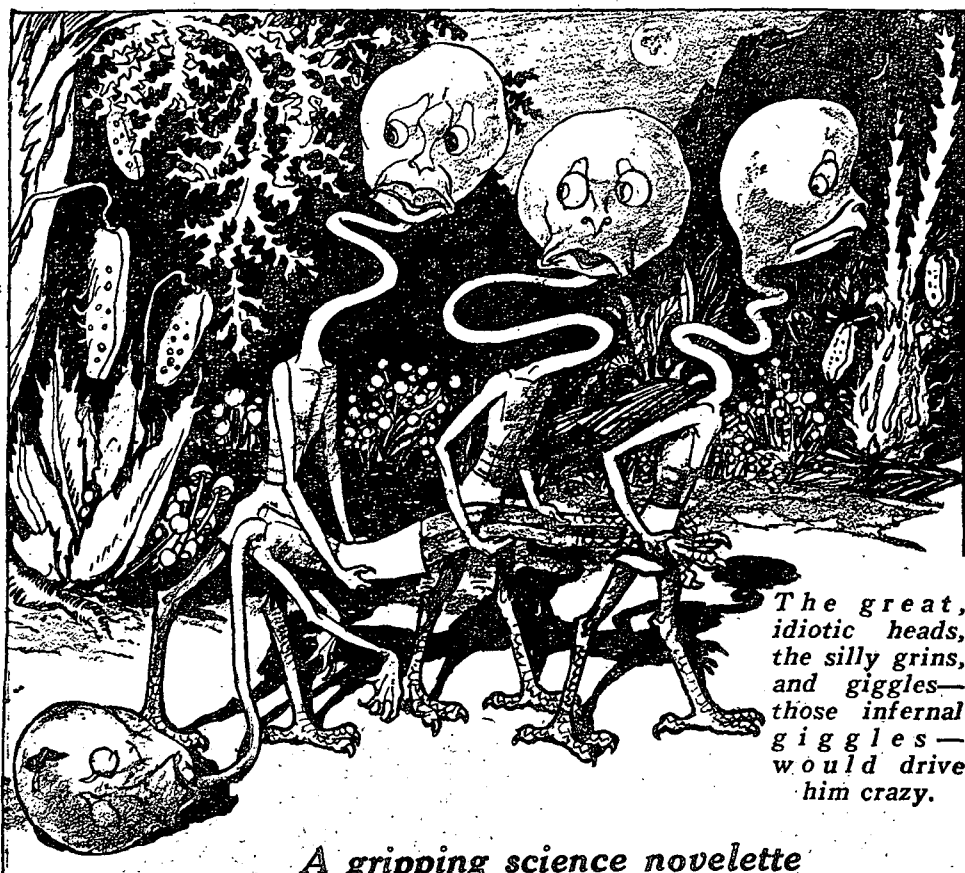
Too vicious a kick, in fact; he had again forgotten the one third normal gravitation of Io, and his whole body followed his kick in a long, twelve-foot arc.

As he struck the ground the four loon-

ies giggled. Their great, idiotic heads, looking like nothing so much as the comic faces painted on Sunday balloons for children, swayed in unison on their five-foot necks, as thin as Grant's wrist.

"Get out!" he blazed, scrambling erect. "Beat it, skiddoo, scam! No chocolate. No candy. Not until you learn that I want ferva leaves, and not any junk you happen to grab. Clear out!"

The loonies—*Lunae Jovis Magni-*



The great, idiotic heads, the silly grins, and giggles—those infernal giggles—would drive him crazy.

A gripping science novelette

The MAD MOON

by Stanley G. Weinbaum

capites, or literally, Bigheads of Jupiter's Moon—backed away, giggling plaintively. Beyond doubt, they considered Grant fully as idiotic as he considered them, and were quite unable to understand the reasons for his anger. But they certainly realized that no candy was to be forthcoming, and their giggles took on a note of keen disappointment.

So keen, indeed, that the leader, after twisting his ridiculous blue face in an imbecilic grin at Grant, voiced a last wild

giggle and dashed his head against a glittering stone-bark tree. His companions casually picked up his body and moved off, with his head dragging behind them on its neck like a prisoner's ball on a chain.

Grant brushed his hand across his forehead and turned wearily toward his stone-bark log shack. A pair of tiny, glittering red eyes caught his attention, and a slinker—*Mus Sapiens*—skipped his six-inch form across the threshold,

bearing under his tiny, skinny arm what looked very much like Grant's clinical thermometer.

Grant yelled angrily at the creature, seized a stone, and flung it vainly. At the edge of the brush, the slinker turned its ratlike, semihuman face toward him, squeaked its thin gibberish, shook a microscopic fist in manlike wrath, and vanished, its batlike cowl of skin fluttering like a cape. It looked, indeed, very much like a black rat wearing a cape.

It had been a mistake, Grant knew, to throw the stone at it. Now the tiny fiends would never permit him any peace, and their diminutive size and pseudo-human intelligence made them infernally troublesome as enemies. Yet, neither that reflection nor the loony's suicide troubled him particularly; he had witnessed instances like the latter too often, and besides, his head felt as if he were in for another siege of white fever.

He entered the shack, closed the door, and stared down at his pet parcat. "Oliver," he growled, "you're a fine one. Why the devil don't you watch out for slinkers? What are you here for?"

The parcat rose on its single, powerful hind leg, clawing at his knees with its two forelegs. "The red jack on the black queen," it observed placidly. "Ten loonies make one half-wit."

Grant placed both statements easily. The first was, of course, an echo of his preceding evening's solitaire game, and the second of yesterday's session with the loonies. He grunted abstractedly and rubbed his aching head. White fever again, beyond doubt.

He swallowed two feverin tablets, and sank listlessly to the edge of his bunk, wondering whether this attack of *blancha* would culminate in delirium.

He cursed himself for a fool for ever taking this job on Jupiter's third habitable moon, Io. The tiny world was a planet of madness, good for nothing except the production of ferva leaves, out

of which Earthly chemists made as many potent alkaloids as they once made from opium.

Invaluable to medical science, of course, but what difference did that make to him? What difference, even, did the munificent salary make, if he got back to Earth a raving maniac after a year in the equatorial regions of Io? He swore bitterly that when the plane from Junopolis landed next month for his ferva, he'd go back to the polar city with it, even though his contract with Neilan Drug called for a full year, and he'd get no pay if he broke it. What good was money to a lunatic?

II.

THE WHOLE little planet was mad—loonies, parcats, slinkers and Grant Calthorpe—all crazy. At least, anybody who ever ventured outside either of the two polar cities, Junopolis on the north and Herapolis on the south, was crazy. One could live there in safety from white fever, but anywhere below the twentieth parallel it was worse than the Cambodian jungles on Earth.

He amused himself by dreaming of Earth. Just two years ago he had been happy there, known as a wealthy, popular sportsman. He had been just that, too; before he was twenty-one he had hunted knife-kite and threadworm on Titan, and triops and uniped on Venus.

That had been before the gold crisis of 2110 had wiped out his fortune. And—well, if he had to work, it had seemed logical to use his interplanetary experience as a means of livelihood. He had really been enthusiastic at the chance to associate himself with Neilan Drug.

He had never been on Io before. This wild little world was no sportsman's paradise, with its idiotic loonies and wicked, intelligent, tiny slinkers. There wasn't anything worth hunting on the feverish little moon, bathed in

warmth by the giant Jupiter only a quarter million miles away.

If he *had* happened to visit it, he told himself ruefully, he'd never have taken the job; he had visualized Io as something like Titan, cold but clean.

Instead it was as hot as the Venus Hotlands because of its glowing primary, and subject to half a dozen different forms of steamy daylight—sun day, Jovian day, Jovian and sun day, Europa light, and occasionally actual and dismal night. And most of these came in the course of Io's forty-two-hour revolution, too—a mad succession of changing lights. He hated the dizzy days, the jungle, and Idiots' Hills stretching behind his shack.

It was Jovian and solar day at the present moment, and that was the worst of all, because the distant sun added its modicum of heat to that of Jupiter. And to complete Grant's discomfort now was the prospect of a white fever attack. He swore as his head gave an additional twinge, and then swallowed another feverin tablet. His supply of these was diminishing, he noticed; he'd have to remember to ask for some when the plane called—no, he was going back with it.

Oliver rubbed against his leg. "Idiots, fools, nitwits, imbeciles," remarked the parcat affectionately. "Why did I have to go to that damn dance?"

"Huh?" said Grant. He couldn't remember having said anything about a dance. It must, he decided, have been said during his last fever madness.

Oliver creaked like the door, then giggled like a loony. "It'll be all right," he assured Grant. "Father is bound to come soon."

"Father!" echoed the man. His father had died fifteen years before. "Where'd you get that from, Oliver?"

"It must be the fever," observed Oliver placidly. "You're a nice kitty, but I wish you had sense enough to know what you're saying. And I wish father

would come." He finished with a suppressed gurgle that might have been a sob.

Grant stared dizzily at him. He hadn't said any of those things; he was positive. The parcat must have heard them from somebody else—Somebody else? Where within five hundred miles was there anybody else?

"Oliver!" he bellowed. "Where'd you hear that? Where'd you hear it?"

The parcat backed away, startled. "Father is idiots, fools, nitwits, imbeciles," he said anxiously. "The red jack on the nice kitty."

"Come here!" roared Grant. "Whose father? Where have you—Come here, you imp!"

He lunged at the creature. Oliver flexed his single hind leg and flung himself frantically to the cowl of the wood stove. "It must be the fever!" he squalled. "No chocolate!"

He leaped like a three-legged flash for the flue opening. There came a sound of claws grating on metal, and then he had scrambled through.

GRANT followed him. His head ached from the effort, and with the still sane part of his mind he knew that the whole episode was doubtless white fever delirium, but he plowed on.

His progress was a nightmare. Loonies kept bobbing their long necks above the tall bleeding-grass, their idiotic giggles and imbecilic faces adding to the general atmosphere of madness.

Wisps of fetid, fever-bearing vapors spouted up at every step on the spongy soil. Somewhere to his right a slinker squeaked and gibbered; he knew that a tiny slinker village was over in that direction, for once he had glimpsed the neat little buildings, constructed of small, perfectly fitted stones like a miniature medieval town, complete to towers and battlements. It was said that there were even slinker wars.

His head buzzed and whirled from the

combined effects of feverin and fever. It was an attack of *blancha*, right enough, and he realized that he was an imbecile, a loony, to wander thus away from his shack. He should be lying on his bunk; the fever was not serious, but more than one man had died on Io in the delirium, with its attendant hallucinations.

He was delirious now. He knew it as soon as he saw Oliver, for Oliver was placidly regarding an attractive young lady in perfect evening dress of the style of the second decade of the twenty-second century. Very obviously that was a hallucination, since girls had no business in the Ionian tropics, and if by some wild chance one should appear there, she would certainly not choose formal garb.

The hallucination had fever, apparently, for her face was pale with the whiteness that gave *blancha* its name. Her gray eyes regarded him without surprise as he wound his way through the bleeding-grass to her.

"Good afternoon, evening, or morning," he remarked, giving a puzzled glance at Jupiter, which was rising, and the sun, which was setting. "Or perhaps merely good day, Miss Lee Neilan."

She gazed seriously at him. "Do you know," she said, "you're the first one of the illusions that I haven't recognized? All my friends have been around, but you're the first stranger. Or are you a stranger? You know my name—but you ought to, of course, being my own hallucination."

"We won't argue about which of us is the hallucination," he suggested. "Let's do it this way. The one of us that disappears first is the illusion. Bet you five dollars you do."

"How could I collect?" she said. "I can't very well collect from my own dream."

"That is a problem." He frowned.

"My problem, of course, not yours. I know I'm real."

"How do you know my name?" she demanded.

"Ah!" he said. "From intensive reading of the society sections of the newspapers brought by my supply plane. As a matter of fact, I have one of your pictures cut out and pasted next to my bunk. That probably accounts for my seeing you now. I'd like to really meet you some time."

"What a gallant remark for an apparition!" she exclaimed. "And who are you supposed to be?"

"Why, I'm Grant Calthorpe. In fact, I work for your father, trading with the loonies for ferva."

"Grant Calthorpe," she echoed. She narrowed her fever-dulled eyes as if to bring him into better focus. "Why, you are!"

Her voice wavered for a moment, and she brushed her hand across her pale brow. "Why should you pop up out of my memories? It's strange. Three or four years ago, when I was a romantic schoolgirl and you the famous sportsman, I was madly in love with you. I had a whole book filled with your pictures—Grant Calthorpe dressed in parka for hunting threadworm on Titan—Grant Calthorpe beside the giant uniped he killed near the Mountains of Eternity. You're—you're really the pleasantest hallucination I've had so far. Delirium would be—fun"—she pressed her hand to her brow again—"if one's head—didn't ache so!"

"Gee!" thought Grant, "I wish that were true, that about the book. This is what psychology calls a wish-fulfillment dream." A drop of warm rain plopped on his neck. "Got to get to bed," he said aloud. "Rain's bad for *blancha*. Hope to see you next time I'm feverish."

"Thank you," said Lee Neilan with dignity. "It's quite mutual."

He nodded, sending a twinge through

his head. "Here, Oliver," he said to the drowsing parcat. "Come on."

"That isn't Oliver," said Lee. "It's Polly. It's kept me company for two days, and I've named it Polly."

"Wrong gender," muttered Grant. "Anyway, it's my parcat, Oliver. Aren't you, Oliver?"

"Hope to see you," said Oliver sleepily.

"It's Polly. Aren't you, Polly?"

"Bet you five dollars," said the parcat. He rose, stretched and loped off into the underbrush. "It must be the fever," he observed as he vanished.

"It must be," agreed Grant. He turned away. "Good-by, Miss—or I might as well call you Lee, since you're not real. Good-by, Lee."

"Good-by, Grant. But don't go that way. There's a slinker village over in the grass."

"No. It's over there."

"It's *there*," she insisted. "I've been watching them build it. But they can't hurt you anyway, can they? Not even a slinker could hurt an apparition. Good-by, Grant." She closed her eyes wearily.

III.

IT WAS raining harder now. Grant pushed his way through the bleeding-grass, whose red sap collected in bloody drops on his boots. He had to get back to his shack quickly, before the white fever and its attendant delirium set him wandering utterly astray. He needed ferverin.

Suddenly he stopped short. Directly before him the grass had been cleared away, and in the little clearing were the shoulder-high towers and battlements of a slinker village—a new one, for half-finished houses stood among the others, and hooded six-inch forms toiled over the stones.

There was an outcry of squeaks and gibberish. He backed away, but a dozen tiny darts whizzed about him. One

stuck like a toothpick in his boot, but none, luckily, scratched his skin, for they were undoubtedly poisoned. He moved more quickly, but all around in the thick, fleshy grasses were rustlings, squeakings, and incomprehensible imprecations.

He circled away. Loonies kept popping their balloon heads over the vegetation, and now and again one giggled in pain as a slinker bit or stabbed it. Grant cut toward a group of the creatures, hoping to distract the tiny fiends in the grass, and a tall, purple-faced loony curved its long neck above him, giggling and gesturing with its skinny fingers at a bundle under its arm.

He ignored the thing, and veered toward his shack. He seemed to have eluded the slinkers, so he trudged doggedly on, for he needed a ferverin tablet badly. Yet, suddenly he came to a frowning halt, turned, and began to retrace his steps.

"It can't be so," he muttered. "But she told me the truth about the slinker village. I didn't know it was there. Yet how could a hallucination tell me something I didn't know?"

Lee Neilan was sitting on the stone-bark log exactly as he had left her, with Oliver again at her side. Her eyes were closed, and two slinkers were cutting at the long skirt of her gown with tiny, glittering knives.

Grant knew that they were always attracted by Terrestrial textiles; apparently they were unable to duplicate the fascinating sheen of satin, though the fiends were infernally clever with their tiny hands. As he approached, they tore a strip from thigh to ankle, but the girl made no move. Grant shouted, and the vicious little creatures mouthed unutterable curses at him as they skittered away with their silken plunder.

Lee Neilan opened her eyes. "You again," she murmured vaguely. "A moment ago it was father. Now it's you." Her pallor had increased; the white

fever was running its course in her body.

"Your father! Then that's where Oliver heard— Listen, Lee. I found the slinker village. I didn't know it was there, but I found it just as you said. Do you see what that means? We're both real!"

"Real?" she said dully. "There's a purple loony grinning over your shoulder. Make him go away. He makes me feel—sick."

He glanced around; true enough, the purple-faced loony was behind him. "Look here," he said, seizing her arm. The feel of her smooth skin was added proof. "You're coming to the shack for ferverin." He pulled her to her feet. "Don't you understand? I'm *real*!"

"No, you're not," she said dazedly. "Listen, Lee. I don't know how in the devil you got here or why, but I know Io hasn't driven me that crazy yet. You're real and I'm real." He shook her violently. "I'm *real*!" he shouted.

Faint comprehension showed in her dazed eyes. "Real?" she whispered. "Real! Oh, Lord! Then take—me out of—this mad place!" She swayed, made a stubborn effort to control herself, then pitched forward against him.

Of course on Io her weight was negligible, less than a third Earth normal. He swung her into his arms and set off toward the shack, keeping well away from both slinker settlements. Around him bobbed excited loonies, and now and again the purple-faced one, or another exactly like him, giggled and pointed and gestured.

The rain had increased, and warm rivulets flowed down his neck, and to add to the madness, he blundered near a copse of stinging palms, and their barbed lashes stung painfully through his shirt. Those stings were virulent too, if one failed to disinfect them; indeed, it was largely the stinging palms that kept traders from gathering their own ferva instead of depending on the loonies.

BEHIND the low rain clouds, the sun had set, and it was ruddy Jupiter daylight, which lent a false flush to the cheeks of the unconscious Lee Neilan, making her still features very lovely.

Perhaps he kept his eyes too steadily on her face, for suddenly Grant was among slinkers again; they were squeaking and sputtering, and the purple loony leaped in pain as teeth and darts pricked his legs. But, of course, loonies were immune to the poison.

The tiny devils were around his feet now. He swore in a low voice and kicked vigorously, sending a ratlike form spinning fifty feet in the air. He had both automatic and flame pistol at his hip, but he could not use them for several reasons.

First, using an automatic against the tiny hordes was much like firing into a swarm of mosquitoes; if the bullet killed one or two or a dozen, it made no appreciable impression on the remaining thousands. And as for the flame pistol, that was like using a Big Bertha to swat a fly. Its vast belch of fire would certainly incinerate all the slinkers in its immediate path, along with grass, trees, and loonies, but that again would make but little impress on the surviving hordes, and it meant laboriously recharging the pistol with another black diamond and another barrel.

He had gas bulbs in the shack, but they were not available at the moment, and besides, he had no spare mask, and no chemist has yet succeeded in devising a gas that would kill slinkers without being also deadly to humans. And, finally, he couldn't use any weapon whatsoever right now, because he dared not drop Lee Neilan to free his hands.

Ahead was the clearing around the shack. The space was full of slinkers, but the shack itself was supposed to be slinkerproof, at least for reasonable lengths of time, since stone-bark logs were very resistant to their tiny tools.

But Grant perceived that a group of



"She's real! Oh, Lord, help us get out—out of this mad place!"

the diminutive devils were around the door, and suddenly he realized their intent. They had looped a cord of some sort over the knob, and were engaged now in twisting it!

Grant yelled and broke into a run. While he was yet half a hundred feet distant, the door swung inward and the rabble of slinkers flowed into the shack.

He dashed through the entrance. Within was turmoil. Little hooded shapes were cutting at the blankets on his bunk, his extra clothing, the sacks he hoped to fill with ferva leaves, and were pulling at the cooking utensils, or at any and all loose objects.

He bellowed and kicked at the swarm. A wild chorus of squeaks and gibberish arose as the creatures skipped and dodged about him. The fiends were intelligent enough to realize that he could do nothing with his arms occupied by Lee Neilan. They skittered out of the way of his kicks, and while he threatened a group at the stove, another rabble tore at his blankets.

In desperation he charged at the bunk. He swept the girl's body across it to clear it, dropped her on it, and seized a grass broom he had made to facilitate his housekeeping. With wide strokes of its handle he attacked the slinkers, and the squeals were checkered by cries and whimpers of pain.

A few broke for the door, dragging whatever loot they had. He spun around in time to see half a dozen swarming around Lee Neilan, tearing at her clothing, at the wrist, watch on her arm, at the satin evening pumps on her small feet. He roared a curse at them and battered them away, hoping that none had pricked her skin with virulent dagger or poisonous tooth.

He began to win the skirmish. More of the creatures drew their black capes close about them and scurried over the threshold with their plunder. At last, with a burst of squeaks, the remainder, laden and empty-handed alike, broke and

ran for safety, leaving a dozen furry, impish bodies slain or wounded.

Grant swept these after the others with his erstwhile weapon, closed the door in the face of a loony that bobbed in the opening, latched it against any repetition of the slinker's trick, and stared in dismay about the plundered dwelling.

Cans had been rolled or dragged away. Every loose object had been pawed by the slinkers' foul little hands, and Grant's clothes hung in ruins on their hooks against the wall. But the tiny robbers had not succeeded in opening the cabinet nor the table drawer; and there was food left.

Six months of Ionian life had left him philosophical; he swore heartily, shrugged resignedly, and pulled his bottle of ferverin from the cabinet.

His own spell of fever had vanished as suddenly and completely as *blancha* always does when treated, but the girl, lacking ferverin, was paper-white and still. Grant glanced at the bottle; eight tablets remained.

"Well, I can always chew ferva leaves," he muttered. That was less effective than the alkaloid itself, but it would serve, and Lee Neilan needed the tablets. He dissolved two of them in a glass of water, and lifted her head.

She was not too inert to swallow, and he poured the solution between her pale lips, then arranged her as comfortably as he could. Her dress was a tattered silken ruin, and he covered her with a blanket that was no less a ruin. Then he disinfected his palm stings, pulled two chairs together, and sprawled across them to sleep.

He started up at the sound of claws on the roof, but it was only Oliver, gingerly testing the flue to see if it were hot. In a moment the parcat scrambled through, stretched himself, and remarked, "I'm real and you're real."

"Imagine that!" grunted Grant sleepily.

IV.

WHEN he awoke it was Jupiter and Europa light, which meant he had slept about seven hours, since the brilliant little third moon was just rising. He rose and gazed at Lee Neilan, who was sleeping soundly with a tinge of color in her face that was not entirely due to the ruddy daylight. The *blancha* was passing.

He dissolved two more tablets in water, then shook the girl's shoulder. Instantly her gray eyes opened, quite clear now, and she looked up at him without surprise.

"Hello, Grant," she murmured. "So it's you again. Fever isn't so bad, after all."

"Maybe I ought to let you stay feverish," he grinned. "You say such nice things. Wake up and drink this, Lee."

She became suddenly aware of the shack's interior. "Why— Where is this? It looks—real!"

"It is. Drink this ferverin."

She obeyed, then lay back and stared at him perplexedly. "Real?" she said. "And you're real?"

"I think I am."

A rush of tears clouded her eyes. "Then—I'm out of that place? That horrible place?"

"You certainly are." He saw signs of her relief becoming hysteria, and hastened to distract her. "Would you mind telling me how you happened to be there—and dressed for a party, too?"

She controlled herself. "I was dressed for a party. A party in Heraopolis. But I was in Junopolis, you see."

"I don't see. In the first place, what are you doing on Io, anyway? Every time I ever heard of you, it was in connection with New York or Paris society."

She smiled. "Then it wasn't all delirium, was it? You did say that you had one of my pictures— Oh, that one!" She frowned at the print on

the wall. "Next time a news photographer wants to snap my picture, I'll remember not to grin like—like a loony. But as to how I happen to be on Io, I came with father, who's looking over the possibilities of raising ferva on plantations instead of having to depend on traders and loonies. We've been here three months, and I've been terribly bored. I thought Io would be exciting, but it wasn't—until recently."

"But what about that dance? How'd you manage to get here, a thousand miles from Junopolis?"

"Well," she said slowly, "it was terribly tiresome in Junopolis. No shows, no sport, nothing but an occasional dance. I got restless. When there were dances in Heraopolis, I formed the habit of flying over there. It's only four or five hours in a fast plane, you know. And last week—or whenever it was—I'd planned on flying down, and Harvey—that's father's secretary—was to take me. But at the last minute father needed him, and forbade my flying alone."

Grant felt a strong dislike for Harvey. "Well?" he asked.

"So I flew alone," she finished demurely.

"And cracked up, eh?"

"I can fly as well as anybody," she retorted. "It was just that I followed a different route, and suddenly there were mountains ahead."

He nodded. "The Idiots' Hills," he said. "My supply plane detours five hundred miles to avoid them. They're not high, but they stick right out above the atmosphere of this crazy planet. The air here is dense but shallow."

"I know that. I knew I couldn't fly above them, but I thought I could hurdle them. Work up full speed, you know, and then throw the plane upward. I had a closed plane, and gravitation is so weak here. And besides, I've seen it done several times, especially with rocket-driven craft. The jets help to

support the plane even after the wings are useless for lack of air."

"What a damn fool stunt!" exclaimed Grant. "Sure it can be done, but you have to be an expert to pull out of it when you hit the air on the other side. You hit fast, and there isn't much falling room."

"So I found out," said Lee ruefully. "I almost pulled out, but not quite, and I hit in the middle of some stinging palms. I guess the crash dazed them, because I managed to get out before they started lashing around. But I couldn't reach my plane again, and it was—I only remember two days of it—but it was horrible!"

"It must have been," he said gently.

"I knew that if I didn't eat or drink, I had a chance of avoiding white fever. The not eating wasn't so bad, but the not drinking—well, I finally gave up and drank out of a brook. I didn't care what happened if I could have a few moments that weren't thirst-tortured. And after that it's all confused and vague."

"You should have chewed ferva leaves."

"I didn't know that. I wouldn't have even known what they looked like, and besides, I kept expecting father to appear. He must be having a search made by now."

"He probably is," rejoined Grant ironically. "Has it occurred to you that there are thirteen million square miles of surface on little Io? And that for all he knows, you might have crashed on any square mile of it? When you're flying from north pole to south pole, there *isn't* any shortest route. You can cross any point on the planet."

HER gray eyes started wide. "But I——"

"Furthermore," said Grant, "this is probably the *last* place a searching party would look. They wouldn't think any one but a loony would try to hurdle Idiots' Hills, in which thesis I quite

agree. So it looks very much, Lee Neilan, as if you're marooned here until my supply plane gets here next month!"

"But father will be crazy! He'll think I'm dead!"

"He thinks that now, no doubt."

"But we can't——" She broke off, staring around the tiny shack's single room. After a moment she sighed resignedly, smiled, and said softly, "Well, it might have been worse, Grant. I'll try to earn my keep."

"Good. How do you feel, Lee?"

"Quite normal. I'll start right to work." She flung off the tattered blanket, sat up, and dropped her feet to the floor. "I'll fix dinn—— Good night! My dress!" She snatched the blanket about her again.

He grinned. "We had a little run-in with the slinkers after you had passed out. They did for my spare wardrobe too."

"It's ruined!" she wailed.

"Would needle and thread help? They left that, at least, because it was in the table drawer."

"Why, I couldn't make a good swimming suit out of this!" she retorted. "Let me try one of yours."

By dint of cutting, patching, and mending, she at last managed to piece one of Grant's suits to respectable proportions. She looked very lovely in shirt and trousers, but he was troubled to note that a sudden pallor had overtaken her.

It was the *riblanca*, the second spell of fever that usually followed a severe or prolonged attack. His face was serious as he cupped two of his last four ferverin tablets in his hand.

"Take these," he ordered. "And we've got to get some ferva leaves somewhere. The plane took my supply away last week, and I've had bad luck with my loonies ever since. They haven't brought me anything but weeds and rubbish."

Lee puckered her lips at the bitter-

ness of the drug, then closed her eyes against its momentary dizziness and nausea. "Where can you find ferva?" she asked.

He shook his head perplexedly, glancing out at the setting mass of Jupiter, with its bands glowing creamy and brown, and the Red Spot boiling near the western edge. Close above it was the brilliant little disk of Europa. He frowned suddenly, glanced at his watch and then at the almanac on the inside of the cabinet door.

"It'll be Europa light in fifteen minutes," he muttered, "and true night in twenty-five—the first true night in half a month. I wonder——"

He gazed thoughtfully at Lee's face. He knew where ferva grew. One dared not penetrate the jungle itself, where stinging palms and arrow vines and the deadly worms called toothers made such a venture sheer suicide for any creatures but loonies and slinkers. But he knew where ferva grew——

In Io's rare true night even the clearing might be dangerous. Not merely from slinkers, either; he knew well enough that in the darkness creatures crept out of the jungle who otherwise remained in the eternal shadows of its depths—toothers, bullet-head frogs, and doubtless many unknown slimy, venomous, mysterious beings never seen by man. One heard stories in Herapolis and——

But he had to get ferva, and he knew where it grew. Not even a loony would try to gather it there, but in the little gardens or farms around the tiny slinker towns, there was ferva growing.

He switched on a light in the gathering dusk. "I'm going outside a moment," he told Lee Neilan. "If the *blancha* starts coming back, take the other two tablets. Wouldn't hurt you to take 'em anyway. The slinkers got away with my thermometer, but if you get dizzy again, you take 'em."

"Grant! Where——"

"I'll be back," he called, closing the door behind him.

A LOONY, purple in the bluish Europa light, bobbed up with a long giggle. He waved the creature aside and set off on a cautious approach to the neighborhood of the slinker village—the old one, for the other could hardly have had time to cultivate its surrounding ground. He crept warily through the bleeding-grass, but he knew his stealth was pure optimism. He was in exactly the position of a hundred-foot giant trying to approach a human city in secrecy—a difficult matter even in the utter darkness of night.

He reached the edge of the slinker clearing. Behind him, Europa, moving as fast as the second hand on his watch, plummeted toward the horizon. He paused in momentary surprise at the sight of the exquisite little town, a hundred feet away across the tiny square fields, with lights flickering in its hand-wide windows. He had not known that slinker culture included the use of lights, but there they were, tiny candles or perhaps diminutive oil lamps.

He blinked in the darkness. The second of the ten-foot fields looked like—it was—ferva. He stooped low, crept out, and reached his hand for the fleshy, white leaves. And at that moment came a shrill giggle and the crackle of grass behind him. The loony! The idiotic purple loony!

Squeaking shrieks sounded. He snatched a double handful of ferva, rose, and dashed toward the lighted window of his shack. He had no wish to face poisoned barbs or disease-bearing teeth, and the slinkers were certainly aroused. Their gibbering sounded in chorus; the ground looked black with them.

He reached the shack, burst in, slammed and latched the door. "Got it!" He grinned. "Let 'em rave outside now."

They were raving. Their gibberish

sounded like the creaking of worn machinery. Even Oliver opened his drowsy eyes to listen. "It must be the fever," observed the parcat placidly.

Lee was certainly no paler; the *ri-blancha* was passing safely. "Ugh!" she said, listening to the tumult without. "I've always hated rats, but slinkers are worse. All the shrewdness and viciousness of rats plus the intelligence of devils."

"Well," said Grant thoughtfully, "I don't see what they can do. They've had it in for me anyway."

"It sounds as if they're going off," said the girl, listening. "The noise is fading."

Grant peered out of the window. "They're still around. They've just passed from swearing to planning, and I wish I knew what. Some day, if this crazy little planet ever becomes worth human occupation, there's going to be a show-down between humans and slinkers."

"Well? They're not civilized enough to be really a serious obstacle, and they're so small, besides."

"But they learn," he said. "They learn so quickly, and they breed like flies. Suppose they pick up the use of gas, or suppose they develop little rifles for their poisonous darts. That's possible, because they work in metals right now, and they know fire. That would put them practically on a par with man as far as offense goes, for what good are our giant cannons and rocket planes against six-inch slinkers? And to be just on even terms would be fatal; one slinker for one man would be a hell of a trade."

Lee yawned. "Well, it's not our problem. I'm hungry, Grant."

"Good. That's a sign the *blancha's* through with you. We'll eat and then sleep a while, for there's five hours of darkness."

"But the slinkers?"

"I don't see what they can do. They

couldn't cut through stone-bark walls in five hours, and anyway, Oliver would warn us if one managed to slip in somewhere."

V.

IT WAS light when Grant awoke, and he stretched his cramped limbs painfully across his two chairs. Something had wakened him, but he didn't know just what. Oliver was pacing nervously beside him, and now looked anxiously up at him.

"I've had bad luck with my loonies," announced the parcat plaintively. "You're a nice kitty."

"So are you," said Grant. Something had wakened him, but what?

Then he knew, for it came again—the merest trembling of the stone-bark floor. He frowned in puzzlement. Earthquakes? Not on Io, for the tiny sphere had lost its internal heat untold ages ago. Then what?

Comprehension dawned suddenly. He sprang to his feet with so wild a yell that Oliver scrambled sideways with an infernal babble. The startled parcat leaped to the stove and vanished up the flue. His squall drifted faintly back, "It must be the fever!"

Lee had started to a sitting position on the bunk, her gray eyes blinking sleepily.

"Outside!" he roared, pulling her to her feet. "Get out! Quickly!"

"Wh-what—why—"

"Get out!" He thrust her through the door, then spun to seize his belt and weapons, the bag of ferva leaves, a package of chocolate. The floor trembled again, and he burst out of the door with a frantic leap to the side of the dazed girl.

"They've undermined it!" he choked. "The devils undermined the—"

He had no time to say more. A corner of the shack suddenly subsided; the

stone-bark logs grated, and the whole structure collapsed like a child's house of blocks. The crash died into silence, and there was no motion save a lazy wisp of vapor, a few black, ratlike forms scurrying toward the grass, and a purple loony bobbing beyond the ruins.

"The dirty devils!" he swore bitterly. "The damn little black rats! The——"

A dart whistled so close that it grazed his ear and then twitched a lock of Lee's tousled brown hair. A chorus of squeaking sounded in the bleeding-grass.

"Come on!" he cried. "They're out to exterminate us this time. No—this way. Toward the hills. There's less jungle this way."

They could outrun the tiny slinkers easily enough. In a few moments they had lost the sound of squeaking voices, and they stopped to gaze ruefully back on the fallen dwelling.

"Now," he said miserably, "we're both where you were to start with."

*"I'll be damned! Lee!
They're packed in the
canyon, the whole devil's
brood of them!"*

"Oh, no." Lee looked up at him. "We're together now, Grant. I'm not afraid."

"We'll manage," he said with a show



AST-5

of assurance. "We'll put up a temporary shack somehow. We'll——"

A dart struck his boot with a sharp *blup*. The slinkers had caught up to them.

Again they ran toward Idiots' Hills. When at last they stopped, they could look down a long slope and far over the Ionian jungles. There was the ruined shack, and there, neatly checkered, the fields and towers of the nearer slinker town. But they had scarcely caught their breath when gibbering and squeaking came out of the brush.

They were being driven into Idiots' Hills, a region as unknown to man as the icy wastes of Pluto. It was as if the tiny fiends behind them had determined that this time their enemy, the giant trampler and despoiler of their fields, should be pursued to extinction.

WEAPONS were useless. Grant could not even glimpse their pursuers, slipping like hooded rats through the vegetation. A bullet, even if chance sped it through a slinker's body, was futile, and his flame pistol, though its lightning stroke should incinerate tons of brush and bleeding-grass, could no more than cut a narrow path through their horde of tormentors. The only weapons that might have availed, the gas bulbs, were lost in the ruins of the shack.

Grant and Lee were forced upward. They had risen a thousand feet above the plain, and the air was thinning. There was no jungle here, but only great stretches of bleeding-grass, across which a few loonies were visible, bobbing their heads on their long necks.

"Toward—the peaks!" gasped Grant, now painfully short of breath. "Perhaps we can stand rarer air than they."

Lee was beyond answer. She panted doggedly along beside him as they plodded now over patches of bare rock. Before them were two low peaks, like the pillars of a gate. Glancing back,

Grant caught a glimpse of tiny black forms on a clear area, and in sheer anger he fired a shot. A single slinker leaped convulsively, its cape flapping, but the rest flowed on. There must have been thousands of them.

The peaks were closer, no more than a few hundred yards away. They were sheer, smooth, unscalable.

"Between them," muttered Grant.

The passage that separated them was bare and narrow. The twin peaks had been one in ages past; some forgotten volcanic convulsion had split them, leaving this slender canyon between.

He slipped an arm about Lee, whose breath, from effort and altitude, was a series of rasping gasps. A bright dart tinkled on the rocks as they reached the opening, but looking back, Grant could see only a purple loony plodding upward, and a few more to his right. They raced down a straight fifty-foot passage that debouched suddenly into a sizable valley—and there, thunderstruck for a moment, they paused.

A city lay there. For a brief instant Grant thought they had burst upon a vast slinker metropolis, but the merest glance showed otherwise. This was no city of medieval blocks, but a poem in marble, classical in beauty, and of human or near-human proportions. White columns, glorious arches, pure curving domes, an architectural loveliness that might have been born on the Acropolis. It took a second look to discern that the city was dead, deserted, in ruins.

Even in her exhaustion, Lee felt its beauty. "How—how exquisite!" she panted. "One could almost forgive them—for being—slinkers!"

"They won't forgive us for being human," he muttered. "We'll have to make a stand somewhere. We'd better pick a building."

But before they could move more than a few feet from the canyon mouth, a wild disturbance halted them. Grant

whirled, and for a moment found himself actually paralyzed by amazement. The narrow canyon was filled with a gibbering horde of slinkers, like a nauseous, heaving black carpet. But they came no further than the valley end, for grinning, giggling, and bobbing, blocking the opening with tramping three-toed feet, were four loonies!

It was a battle. The slinkers were biting and stabbing at the miserable defenders, whose shrill keenings of pain were less giggles than shrieks. But with a determination and purpose utterly foreign to loonies, their clawed feet tramped methodically up and down, up and down.

Grant exploded, "I'll be damned!" Then an idea struck him. "Lee! They're packed in the canyon, the whole devil's brood of 'em!"

He rushed toward the opening. He thrust his flame pistol between the skinny legs of a loony, aimed it straight along the canyon, and fired.

VI.

INFERNO BURST. The tiny diamond, giving up all its energy in one terrific blast, shot a jagged stream of fire that filled the canyon from wall to wall and vomited out beyond to cut a fan of fire through the bleeding-grass of the slope.

Idiot's Hills reverberated to the roar, and when the rain of debris settled, there was nothing in the canyon save a few bits of flesh and the head of an unfortunate loony, still bouncing and rolling.

Three of the loonies survived. A purple-faced one was pulling his arm, grinning and giggling in imbecile glee. He waved the thing aside and returned to the girl.

"Thank goodness!" he said. "We're out of that, anyway."

"I wasn't afraid, Grant. Not with you."

He smiled. "Perhaps we can find a place here," he suggested. "The fever ought to be less troublesome at this altitude. But—say, this must have been the capital city of the whole slinker race in ancient times. I can scarcely imagine those fiends creating an architecture as beautiful as this—or as large. Why, these buildings are as colossal in proportion to slinker size as the skyscrapers of New York to us!"

"But so beautiful," said Lee softly, sweeping her eyes over the glory of the ruins. "One might almost forgive — Grant! Look at those!"

He followed the gesture. On the inner side of the canyon's portals were gigantic carvings. But the thing that set him staring in amazement was the subject of the portrayal. There, towering far up the cliff sides, were the figures, not of slinkers, but of—loonies! Exquisitely carved, smiling rather than grinning, and smiling somehow sadly, regretfully, pityingly—yet beyond doubt, loonies!

"Good night!" he whispered. "Do you see, Lee? This must once have been a loony city. The steps, the doors, the buildings, all are on their scale of size. Somehow, some time, they must have achieved civilization, and the loonies we know are the degenerate residue of a great race."

"And," put in Lee, "the reason those four blocked the way when the slinkers tried to come through is that they still remember. Or probably they don't actually remember, but they have a tradition of past glories, or more likely still, just a superstitious feeling that this place is in some way sacred. They let us pass because, after all, we look more like loonies than like slinkers. But the amazing thing is that they still possess even that dim memory, because this city must have been in ruins for centuries. Or perhaps even for thousands of years."

"But to think that loonies could ever have had the intelligence to create a culture of their own," said Grant, waving away the purple one bobbing and giggling at his side. Suddenly he paused, turning a gaze of new respect on the creature. "This one's been following me for days. All right, old chap, what is it?"

The purple one extended a sorely bedraggled bundle of bleeding-grass and twigs, giggling idiotically. His ridiculous mouth twisted; his eyes popped in an agony of effort at mental concentration.

"Canny!" he giggled triumphantly.

"The imbecile!" flared Grant. "Nit-wit! Idiot!" He broke off, then laughed. "Never mind. I guess you deserve it." He tossed his package of chocolate to the three delighted loonies. "Here's your candy."

A scream from Lee startled him. She was waving her arms wildly, and over the crest of Idiots' Hills a rocket plane roared, circled, and nosed its way into the valley.

The door opened. Oliver stalked gravely out, remarking casually, "I'm real and you're real." A man followed the parcat—two men.

"Father!" screamed Lee.

IT WAS some time later that Gustavus Neilan turned to Grant. "I can't thank you," he said. "If there's ever any way I can show my appreciation for——"

"There is. You can cancel my contract."

"Oh, you work for me?"

"I'm Grant Calthorpe, one of your traders, and I'm about sick of this crazy planet."

"Of course, if you wish," said Neilan. "If it's a question of pay——"

"You can pay me for the six months I've worked."

"If you'd care to stay," said the older man, "there won't be trading much longer. We've been able to grow ferva near the polar cities, and I prefer plantations to the uncertainties of relying on loonies. If you'd work out your year, we might be able to put you in charge of a plantation by the end of that time."

Grant met Lee Neilan's gray eyes, and hesitated. "Thanks," he said slowly, "but I'm sick of it." He smiled at the girl, then turned back to her father. "Would you mind telling me how you happened to find us? This is the most unlikely place on the planet."

"That's just the reason," said Neilan. "When Lee didn't get back, I thought things over pretty carefully. At last I decided, knowing her as I did, to search the least likely places first. We tried the shores of the Fever Sea, and then the White Desert, and finally Idiots' Hills. We spotted the ruins of a shack, and on the débris was this chap"—he indicated Oliver—"remarking that 'Ten loonies make one half-wit.' Well, the half-wit part sounded very much like a reference to my daughter, and we cruised about until the roar of your flame pistol attracted our attention."

Lee pouted, then turned her serious gray eyes on Grant. "Do you remember," she said softly, "what I told you there in the jungle?"

"I wouldn't even have mentioned that," he replied. "I knew you were delirious."

"But—perhaps I wasn't. Would companionship make it any easier to work out your year? I mean if—for instance—you were to fly back with us to Junapolis and return with a wife?"

"Lee," he said huskily, "you know what a difference that would make, though I can't understand why you'd ever dream of it."

"It must," suggested Oliver, "be the fever."

All Right! All Right!

That means, of course, that you win a point. I'll try to announce forthcoming stories. Your request was near enough unanimous to leave no doubt in my mind as to our future course.

Of course at the moment of going to press with this issue the schedule for the next one is not entirely complete, but I'll try to announce what appears to be safe.

Ralph Milne Farley and Stanley G. Weinbaum, working in collaboration, have produced a fine novëlette, "Smothered Seas." This leads our January list at the moment. I know you'll enjoy it.

"The Isotope Men" by Nat Schachner is second on the list—a novel which is thought-provoking. He presents an idea which, while calling for good imagery, will nevertheless make you ponder the possibilities in his logical development of a new thesis.

"Strange City," by Warner Van Lorne, contains elements which made it a "must" story, even though it left me sort of disappointed at the finish. There are machines on a scale which stagger the mind if you dwell too closely on them, but—I enjoyed it!

"Moon Crystals of Venus," J. Harvey Haggard, comes next. It's a fine short story.

That's all I can tell you now. There might even be changes in this schedule, but I've done my best to fulfill your requests.

And now, to another—and much regretted—announcement. Elliott Dold has suffered from nerves and illness during increasingly frequent periods until he has been forced to retire from active work for a complete rest of at least a year. I'm going to miss him sincerely—and I know you are.

We still have Marchioni and we expect that Wesso will consent to illustrate one or two stories a month. Many of us liked his work on the old Astounding and will welcome his return to science-fiction. Then, when a year has rolled around we shall hope to get Dold back—and feel that our illustrators are without peer in the field.

I have received a lot of letters on the question of the proper balance between science and adventure in our stories. I appreciate them and the help they have given in deciding our policy. But I'm waiting to get as many opinions as possible before drawing a final conclusion. Have YOU stated your desire? If not, won't you do it now?—The Editor.

Human Machines

*A science fantasy which bears the
brand of truth—in its logical results*

by J. Harvey Haggard

MORNING MISTS swam opalescent before the first golden rays of invading sunrise, then became transparent and vanished tenuously into the increasing luminosity of morning. Verdured jungles rose, banked on mountainous slopes like clouds, out of morning dawn, becoming delineated with forest giants and festooning lianas, broken here and there by rotten snags of warped, steel-and-cement ruins, mute vestiges of a civilization existing remotely in the past of time.

Gaily colored birds sang; a wildcat, with strange long tusks, snarled from the thickets, and a half-naked man, shaggy in remnants of tattered clothing, leaped down from a rotting shelf in the ruin and made his way oceanward. His naked arms were covered with scabs, forming over long scratches.

The man's features were gaunt; his eyes were set within dark sockets. He had been feeding on wild fruits which grew profusely in the region. Now he advanced cautiously toward the sandy beach. His eyes, intelligently alert but evidencing mental strain, kept wandering from the jungle, back to the ruins which had once been habitation for mankind.

"Every morning," he muttered, "I expect to wake up and find it all a dream."

Then he halted. He saw something vague out on the water, drifting in with the tide from the direction of the islands

standing several miles off shore. He realized suddenly that he was lonely for some symptom of human existence, that the barbaric jungles, the decadent ruins of former habitations, lifting pitted and ravaged features up to the heavens, were but peopled by intangible ghosts of memories, imbued from knowledge of a bygone day. The only corporeal tenants who came and went were wild beasts.

This bit of flotsam, sighted with the saffron rays of the morning sun, might bring witness of intelligent life, still extant in the primitive world with its reddish, wasted sun, whose rays were lacking in the scintillant, dazzling quality of yore.

He ran to the rocky littoral, shouting aloud for joy. Climbing up a ragged rocky ascent to a shelving position near a massive pinnacle, rearing up like a mastodonic tooth from aqueous depths, he shaded his eyes with his outspread hand and peered out upon the nearing object.

The wind, coming in from the ocean, was coolish and smelled of brine. A wisp of the lingering fog appeared to cling about the floating object. About the edges of the floating obstacle were poisonous green trailers of froth, entangled slimily in what appeared, at the distance, to be black seaweed.

He had a momentary premonition of possible danger, which was precluded logically in his mind by saner thoughts; after all, it wasn't natural to expect the



*"You are the man they slung forward in time!
You are Therm Sutner!"*

materializing apparition to be a mythological sea monster, taking form at this late date in the terrestrial course of events.

His brief span of normal reasoning was superseded by several moments of superlative fear, during which he clung so tightly to the wall of rock rising sheerly at his back that his hands hurt.

Very suddenly he realized that he had ascended a ledgeway that might very easily become a cul-de-sac. The floating debris, some four or five yards long, had abruptly developed multitudinous, grotesque flipper legs—more adaptable for water but very capable on the smooth, wet sand—and was crawling up to the nearest sloping formed by large boulders, worn smooth by the erosion of wind and tide.

THE HUMAN being clung there, his fears and innate repulsions increased and distorted by his solitude, before this unbelievable monster. His teeth chattered uncontrollably, and, though he sought to look directly below the precipitous edge for an avenue of escape, he found himself unable to divert his eyes from the hideous spectacle that was almost hypnotic in its ferocity, ineffable in its alien form and shape.

Above the brackish flipper legs arose a monstrous toady body, scabby and wet, with a high, warty back, and a small knobby protuberance at the foremost end of the podlike body, surmounted by a spray of whiskery attenuations which he had mistaken for seaweed as it swam silently—for it must have been swimming—toward the shore.

He could see two tiny, greenish eyes, like many-faceted beads, gleaming from the upper portion of the protuberance, and the radiation whiskers worked repulsively as if from the ghastly writhing of an inner, fleshy aperture.

The human clung shiveringly to his ledge, at last breaking the spell cast upon him by the mesmeric, diminutive

eyes of the monster. A swift glance about him cut coldly into his heart.

He could not leap down the perpendicular ledge, for the foot of the cliff was ragged with cruel, slime-encrusted rocks. Nor could he retreat along the ledgeway, which ended against the mounting pinnacle of stone, towering above him, seeming higher because of its nearness. No sign of foothold was available for climbing. He must return along the way he had come, or wait silently, hoping the monster would fail to see him.

In his nervousness, his foot ground against a pebble, and it clattered over the edge, rebounding from rocky obstructions as it fell, with a noise that shattered like the rain of hail upon his berserk nerves.

When he turned, hoping the monstrosity had not heard, he found the creature was almost upon him. It had climbed up the slope, its ungainly motion giving it a lurid resemblance to a fat, many-legged leech. He was completely penned.

The man could have screamed. He realized that he would fling himself over the cliff to a sure death, rather than allow those many flipper legs to engulf his body in its nauseous embrace.

He was ineffably startled when the convoluted aperture in the protuberance puffed out erratically, and a voice issued, almost mechanically, from the depths of the creation: "You are the man they slung forward in time," announced the tones impassionately. "You are Therm Sutner."

THERM SUTNER stood, frozen by the realization that a brain with some semblance of intelligence lay within the ghastly contours of the ebony, knotlike protuberance with the gleaming green eyes. He recoiled, although something in his cringing demeanor expressed acquiescence to the other's accusation.

"We have kept a close watch for

you," went on the throaty voice. "I have come for you. I will take you to Darth."

At last Therm Sutner forced himself to speak.

"What manner of being are you?" he demanded jerkily. "What are you—that you speak the human tongue?"

His nearness to the monster brought a loathsome, fishy smell to his nostrils; the convoluted details of its large, sagging body were more offending in close perspective.

As the dripping water dried away from the scaly hide, a dark iridescence became evident in the crenated folds of the bodily layers of skin. As he watched, the whiskery opening gaped widely again, and the thing spoke with slow, ordained tones, totally devoid of expression.

"I have come for you," he repeated. "I will take you to Darth."

There was nothing subtle in its ignoring of the man's question; rather, there came to Therm Sutner's mind an intimation of the limited intelligence within the grotesque creation. It spoke the words as a trained parrot speaks, after having been drilled monotonously to intone certain syllabifications.

Therm Sutner's mentality was weighted by a dulling lassitude. He had been existing these past few weeks under circumstances that were almost prohibitive to the sustenance of life, such as he had formerly known. He had been forced to exist amid the most primitive conditions, surrounded by alien, unexplored environment.

Sometimes he wondered if he were quite sane, or if he could remain totally sane under a continuation of such conditions. Although he instinctively recognized the limited faculties of this strange being before him, he addressed it as an equal in intelligence.

"Then there are yet human beings," he demanded hopefully, "who live? Is your master a human?"

Again the monster worded a repetition of its former announcement, not heeding the query.

"I am a bit bewildered," confessed Therm elusively, hoping to find some means of escape as their talk parried. He tried not to reveal his fear. "I want to think it over."

"I have come for you," reiterated the mechanical tones of the monster, and it edged forward obstinately. Therm Sutner crouched back. His eyes alighted upon a large sharp-cornered stone lying before his feet. He stooped, scooped it up, and hurled it with all his strength.

The massive rock struck the oncoming monster squarely. Several flipper legs were held up defensively. These were crippled into a pulp. The sodden crunch of the flung missile was followed by the dull impact of its fall as it glanced over the ledgeway and rebounded below. No indication of pain or aroused anger was manifest in the unimpeded approach of the creature.

IN ANOTHER MOMENT Therm Sutner was struggling helplessly in the clutch of many flipper legs; he was lifted bodily and bent upward over the warty back. He was held immobile as the creature backed down toward the watery depths.

A stagnant stench permeated his nostrils, suffusing his lungs. His struggles became weaker, as if this unbearable aroma were sapping his energy. His mind was assailed by an inexorable vertigo as the monster floated flatly onto the spent crest of a wave.

Although part of the flipper legs were occupied in holding him helpless, others were striking out into the water, expanding as they caught a liquid thrust, deflating as the paddlelike member was jerked up close to the body and shot out for another stroke.

He realized vaguely that the monster was making its way across the several miles of ocean which separated the coast

from the scattered islands. It bore him upon its fleshy back, where the air could supply the involuntary respiration of his nostrils, even though his mentality was clogged over with an increasing stupor, which resolved gradually into unconsciousness. His last waking thought was of the creature's words: "I will take you to DARTH."

As a last fluctuation, his benumbed brain recognized the significance of the words, and he thought of Lan DARTH, as he had been in that former world.

Therm Sutner had strangely brilliant dreams, segmentary reproductions of his past which could never be repeated in other than figments of his imagination, floating and shifting like vivid mirages through his sleeping consciousness. He could see Lan DARTH, standing there in that old world, populated with its innumerable terrestrials.

Civilization was at its height then. That was what they thought—or most of them thought it, at least—until Lan DARTH had come along and captured the public fancy with his progressive ideas on the culture of humankind.

Lan DARTH's revolutionary movement had swept the earth. Therm Sutner was one of the few who never succumbed. As it happened, he had been the one balking personality who might have blasted the realization of DARTH's dreams.

"No, Lan DARTH," Therm Sutner was saying again in his mind as he lay there. He could see Lan DARTH's square-shaped face, plump but strangely starved in appearance, with the hemispheres at the corners of his jaws, peering at him with angry, penetrative eyes. "I shall never relent. I do not sympathize with any of your ideas."

"Humankind must go on!" Lan DARTH had thundered zealously. "It is bound to its evolutive cradle of the past. It is chained to the husk bringing it out of the chaos. If we will have progress, we must hit at progress. Man is an

elementary creature, a slave to his whims. I am merely proposing that we humantacists will have absolute eugenic control.

"Reproduction of mankind will be done through pathenogenesis, of which we now have the secret, and the incubation will be carried on entirely within specially constructed mechanisms. We know it can be done. Our actual reproduction of species will be continued with a minimum of labor and effort, and with less physical detriment. We individuals will be left thus to devote our time freely to the sciences, to the arts, and toward the practical pursuits of human life."

"Your scheme is mad," Therm Sutner had denounced, "and I will tell you why. The sexual instinct cannot be eradicated. It is woven inextricably into the material of human character, a fundamental that may supersede the instinct of self-preservation. If you attempt to suppress it, you will distort it, but you will never destroy it."

LAN DARTH'S curious eyes had become fixed then; such obstinate resistance infuriated him.

"Hypothetical theorizing!" he snorted.

"But it's not," Therm Sutner had insisted with aggravating logic. "Not at all. Repression exerted upon the instinct has been compared to a finger pressed upon a globule of mercury, which does not destroy it, but simply forces it from its former shape.

"Influenced by repression, men and women have deserted their families to go into the wilderness. They have renounced the world. Torturous visions arose in their minds; they knew them as temptations. They have also renounced cleanliness and sanitary conditions. They have tortured their physical bodies and inflicted serious injuries upon themselves. These results arose from repression.

"You cannot tear the fundamentals apart from a man—and leave a man, Darth."

Lan Darth had sneered; he had motioned then toward the apparatus which could sling men forward into the moving current of time, focusing its nozzles upon Sutner. There was no coming back.

"I thought so, Sutner," he had said. "I am afraid you had better not move."

Even then Therm Sutner had doubted the other's courage. At a movement, he had been flung aside in the corporeal world into a whirling abyss of nothingness. He had no sensation other than a severe dizziness. When he awakened, he was lying upon the sands of an altered world, with civilized ruins staring him in the face.

During his three weeks in this future world, he had found no indications of human life. At first, he had thought vengefully of Darth also, but these thoughts were hazed over by a growing mental torpor, induced by the sense of reality derived from the primitive surroundings, while the memories of that other world seemed far away.

"I am Darth."

A gray expanse of oblivion had elapsed within his brain; now he sat within a gray cell-like chamber, elusively illuminated by a gray, sourceless emanation which might have been exuded from the shimmering walls. A sense of alien strangeness assailed his faculties.

He found it difficult to train his thoughts cohesively upon the unfamiliar outlines of the cubical interior, which gave him a queer impression of extreme simplicity, combined with some vast inner complication his mind could not grasp.

At last a huge convoluted spheroid, braced on a metallic framework and situated centrally within the chamber, attracted his attention. He realized ponderously that the globular, organic

structure was a huge brain, as he observed the atrophied, doll-like lower body and limbs dangling in an aperture within the encompassing support structure.

"You! You are Lan Darth!" That was Therm Sutner's own incredulous voice. It was hesitant, unbelieving.

"Not Lan Darth—just Darth!" said the brain through a tiny mouth aperture at the extreme base of the bulging spheroid skeletal structure. There were no visible indications of eyes, nose, or ears.

"I remember you well, Sutner, though not through this body. By means of our incubated system of reproduction the memories of the intelligence are passed from one brain to another. You are somewhat surprised to see all this change in the earth?"

"Change!" ejaculated Therm Sutner, as his faculties cleared. "Yes, I am. You murdered a civilization, Darth."

THE BRAIN smiled, if the diminutive grimace beneath the vacuous cranium could be denoted as a smile.

"Wrong, Therm, as usual," said the tiny mouth. "We discovered a penetrative radiation which regulated birth control in a negative way. We murdered none! But the undesirables passed away—in a single generation."

"Leaving but the humanicists behind!" exclaimed Therm apprehensively.

The brain seemed to nod. "You will find things vastly different here, Therm—two thousand years in your future."

"Two thousand years!"

"Even I had no idea as to the final achievements, Therm. It was magnificent. We had agreed, we humanicists, to an absolute, continual devotion to scientific pursuits. In the end, our ambitions culminated in a realization that altruism, in its simplest form, was best devoted to our purpose. Several generations passed. Through our genetic

control of negative birth, the undesirables were eliminated.

"Every being in our humancentric realm or era was brought up with one thought in mind, the advancement of humankind; all of the individual's time was allotted to incessant study of one problem or phase of the embetterment of community life, whether he was a soldier, a weaver, a street cleaner, or a scientist.

"In short, it became a period of specialties. Some few persons were devoted solely to production of cells for reproduction; another special section was devoted to government, of which I am the head.

"Let us consider a single case of an individual in such a world as our past became. He was assigned to some particular task, let us say, weaving. His every thought would be devoted to the bettering of himself for his task. Sex consciousness would be eliminated, or if remembered, existed only in the shape of propellent temptations to further the individual in his mental isolation, devoted toward weaving——"

Therm Sutner moved forward accusingly.

"A distortion!" he exclaimed. "I see it as a natural consequence."

The brain frowned: "You will never understand it otherwise, so we will allow your conception to remain. With our example still in mind, we shall presume that years pass, and he seems to have achieved, through intense application——"

"Goaded by his repressive thoughts," charged Therin.

"Through intense application," continued Darth imperturbably, "he becomes the acme of human success in his own line of work. None of human formation can surpass him at his task—of human formation! Then the idea began to occur to these devotees of our humancentric ideals, that a personal, or bodily sacrifice, might be an effort on-

ward toward the goal of achievement. Of what specific use is his human shape? Since sex is eliminated, why adhere to the human shape? Our bodies were puny things, compared to the relative strength of the smaller insects. Why not alter his being, or his descendants, to conform to some shape ideally capable to his becoming—the perfect weaver."

"It might help to rid him of his plaguing thoughts," said Therm icily.

"I AGREE with you there," nodded the brain gravely, "and I thought of it long ago, when I agreed to the demand. The secret of the genes was well known in that advanced age; size, shape, and color could be predetermined and ordained through the comprehensive alteration of the genes and chromosomes in the embryonic life cells.

"This weaver decides to propagate his descendants, the propagation of which was done without sex, through artificial cultivation, in a manner to alter his shape completely, as compared to his own body, taking on a new fleshly pattern especially suited for weaving.

"His mentality, through this progressive method of reincarnation, will be transferred to the new formation, and the old bodily husk may be destroyed. Although the regeneration of the race is carried on, the mentality within, through the practice of discarding old physical bodies for new, is ageless.

"Even I had not anticipated that. We had discovered the secret to eternal life. You will be introduced to the weaver," said the brain drily. "He is a many-tentacled creation, each tentacle to hold a thread, with a single large hand to manipulate the woven product. Metallic looms were done away with as the growth of new limbs and formations made the inanimate parts useless."

Therm Sutner came heavily to his feet; something had occurred to him that froze the marrow of his bones. His

voice was husky with controlled emotions. "What was it?" he demanded hoarsely. "That—that thing—that brought me here."

The brain seemed pleased. The tiny lips twisted sardonically.

"That thing," he returned, "is a human. It is what we call an aquiad. In other words, the ancestor of such as these was a sailor. By controlled propagation, and the elimination of sex, the use of a ship was done away with. The shape of his body was altered for the displacement of water necessary to a floating object.

"By expelling air from enlarged lung cavities, abnormally developed, and unnecessary for the respirational functioning, this aquiad can control its buoyancy. It is even capable of submerging and propelling its way under the water for long distances. To such an extent has humankind advanced!"

The voice of the brain, though not loud, rang with intense pride. It was apparent that Darth was extremely proud of the humantacist development.

Therm Sutner was breathing heavily. The blood vessels at his throat stood out, and he stalked slowly, a formidable, half-naked man, toward the other, with rigid hands outstretched for the throat of the brain.

"Darth!" he snarled. "You've done this for humankind! And I suppose you developed as a giant brain—to rule the others! My Lord—it's horrible, but I'll end your reign——"

The brain smirked. From an opening beyond, a new monstrosity emerged. It was a crouched, two-legged thing, covered on all sides by horny, segmented shell covering. The upper limbs ended in sharp, chitinous cutting implements, as long and sharp as swords. The shell covering curved up in front like a natural shield. Through two transparent horn disks in the upper part of the shield, eyes glared belligerently. The mouth and face was withdrawn beneath

the shell armor, in much the manner of a turtle, as were all of the vulnerable portions of the body.

"This is a soldier," announced Darth sardonically. "A bit different from the police of our day, but much more effective, Therm."

THERM SUTNER stood irresolute. There was some alien quality about his surroundings which failed to be recorded by his senses. There were other fundamental differences, here in this remote period of man's evolutive scale. The light shimmered from the walls with a gossamer, unsolid quality.

The walls had melted then, faded away into nothingness, and new bulwarks, fashioned of curious angles, reared into being, moved on strangely intricate fulcrums, and faded away. The floor was gone, and only the brain remained among the shifting surroundings. Therm saw odd pictures, flung along the clashing vistas. He realized that the brain was talking, that in some way he was visioning this advanced era in the future of mankind.

He caught glimpses of human beings shaped grotesquely like insects, bearing proportionate loads, some of which must have weighed tons. He saw unbelievable malformations, so repugnant and ogreish in appearance that he could scarcely comprehend, as Darth, the brain, expected him to. Often a tentacular creation would be predominated by an enlarged limb of human formation, such as a gigantic foot or hand, revealing that the humantacists had not been able to break away completely from their former ideas of fleshly structure; their mental associates with the past must have rankled within their ageless memories.

At times Therm Sutner seemed to be walking on inclined ways, or steeply ascending paths, although his body moved from a motivation not his own, even as his mind seemed to be impelled.

by a will thought from the brain, floating beside him without visible support or propulsion.

As his body moved, an incessant flow of vistas opened bewilderingly to his eyes from every angle, seemingly defying physical laws as he knew them. There was nothing from personal experience to compare with what he saw; therefore his mental reception was confused; his scrutiny was not keen. Afterward, he could remember this excursion through the city of the humantacists merely through momentary impressions which chanced to inspire his terror.

There was no solidity to what he saw, nothing three-dimensional. Above and below, these endless portrayals of an advanced life rushed past, leaving him dazed and uncomprehending.

"At last man's dream, to navigate the sky, is fulfilled!" muttered the brain, as living vehicles careened vividly against a jagged patch of sky line, flapping tiers of graceful, leathery wings. Therm Sutner felt that the brain had been talking constantly, that his mind had been too occupied to be receptive. "Your impressions are not as comprehensive as I had supposed."

Therm Sutner felt the antagonism radiated from this massive brain. At the same time he was only semiconscious. His mind lay in a stunned condition, as though it were being drained. He fought the increasing sluggishness of his thoughts. In his memory were retained only vague unformed impressions, of traversing cavernous interiors, replete with ineffable shapes and figures.

Once he thought that he was borne aloft by some living leviathan of the skies. The brain floated beside him often. Now he suddenly desired to kill it, but his limbs were as if benumbed; the brain seemed to be aware of his instinctive wish, but contemptuous of it.

Therm Sutner realized abruptly that his impressions were more of the men-

tal than of the physical. He knew, suddenly, that he had been viewing these scenes through other eyes than his own. It were as if his mind had been looking through the faculties of the brain. The thought brought him alert, and he suddenly flung his combined will powers against the brain. Darth was taken unaware.

WITH A SUDDEN SHOCK, Therm Sutner materialized on a high ledge. In the distance he could see the waters of the ocean, and many of the puzzling vistas had vanished in thin air. The brain lay upon the ledge in a ludicrous position of helplessness. There was something of terror expressed in the tiny writhing mouth. A surge of triumph came over Therm. Sensing the strength of his physical dominance, he moved toward the other.

Darth rolled over. His atrophied limbs clawed along the ledge for a hold, looking like a white spider here in the sunlight. Conquering the paralysis of his limbs, Therm moved toward the brain, fixing his mind upon the vindictive thoughts, uppermost in his mentality.

He sensed the mental command of Darth, demanding that he retreat, but it was feeble. He disregarded it. Now it came again, stronger. Therm felt the substantial ledge tremble beneath his feet. Slowly, his body sank. He was wading through the solid metallic flooring when his hands closed about Darth's throat. Simultaneously, a darkness engulfed the upper light. Slimy tentacles came out of the dark, jerking at his hands. His jaded mind succumbed entirely before the blast of this new presence.

He was lying on the deserted beach of the mainland when he opened his eyes. The sun was low in the west. Small green-and-gold birds of the jungle fluttered noisily from the foliage of the underbrush, screeching in alarm.

He came hurriedly to his feet, having sighted a slender, elongated shape dipping low across the sand in his direction. He knew at once that this had caused the outcries from the jungle flock.

It was a snake, but Therm, standing there half-naked, was not afraid. He had killed several during his few weeks of survival here. He killed this one with a stick and threw it into the water.

He was hungry, and there were several trees of wild plums near. He picked the ripe fruit from the lower limbs as the frightened birds scolded from the upper branches. Then he squatted on a patch of grassy sward and partook of his crude repast.

It was not until much later that he recalled the brief visioning of the day. His recollections were confusing, and very frightening. He wondered if they were real, after all. Looking out toward the islands, he saw their dark shapes looming black and elongated across the water at sunset.

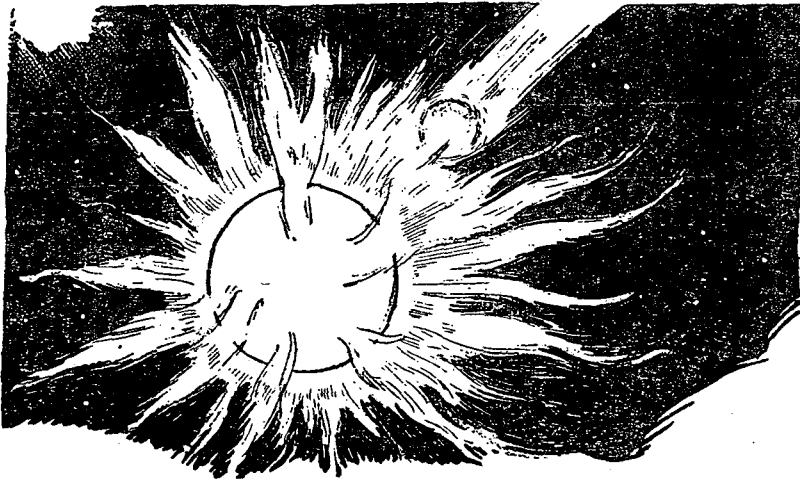
Then he slowly shook his head. If it were not his imagination, then he was doomed to live and die, alone in the

jungle, doomed to as certain a death as if stabbed to death with a knife, cutting to the heart. The humantacists were not brutal in their extirpation of the undesirables. They merely allowed them to die.

Therm Sutner wagged his head dubiously and kicked the sand over the spot where he had awakened. It were better, after all, if the entire incident was treated as a dream, and forgotten as an illusion. If it had been real, he had not been conscious of the return.

His eyes swept the rocky shore, and as dusk stole again over this new, primitive world, and the waning sun shed its last ray before the coming of night, he glanced toward the dark and ominous ruins, where black night birds were flying. He was not superstitious, but, sometimes, he felt that with the coming of night the ghosts of the past began to walk through the crumbling streets and rotting remains of a former life. Picking up a large, knotted stick, he made his way cautiously to the shelving which provided shelter for the night.

He could not believe that there were no more men.



BLUE MAGIC

Continuing the gripping story of a woman who held all the power of a supreme science—and abused it.

by Charles Willard Diffin

UP TO NOW:

Mystery has come to Black Mountain. On Tabletop, a barren, rocky plateau, Rance Driggs, forestry man, finds a great oval area overgrown with grass where only rock has been. A month's growth has sprung up over night.

Then, close to Driggs' tent, high up on Black Mountain, is the print of a man's bare foot. A girl appears in the clearing; she is Katharine Putnam, nicknamed "Kitten," staying down at the lodge.

Leaving, she screams for help from down the trail. "There was something there in the woods," she tells Rance. But marks in the soft earth are not human prints this time; they are marks of monstrous three-toed feet.

Accompanying the girl to the lodge, they both see a blue star that flashes at terrific speed, stops, then vanishes behind Black Mountain, while sound like thunder is heard.

Returning, Driggs finds his tent disturbed, and outside the tent five-toed footprints have been followed by something tearing the soft earth with ugly three-toed feet.

In the morning Driggs finds a naked man near a spring on the trail. A rattlesnake has struck him. Driggs gives first aid and is sucking the poison from the wound when he glimpses on a ledge above him a hideous face. Light flashes and stuns Driggs.

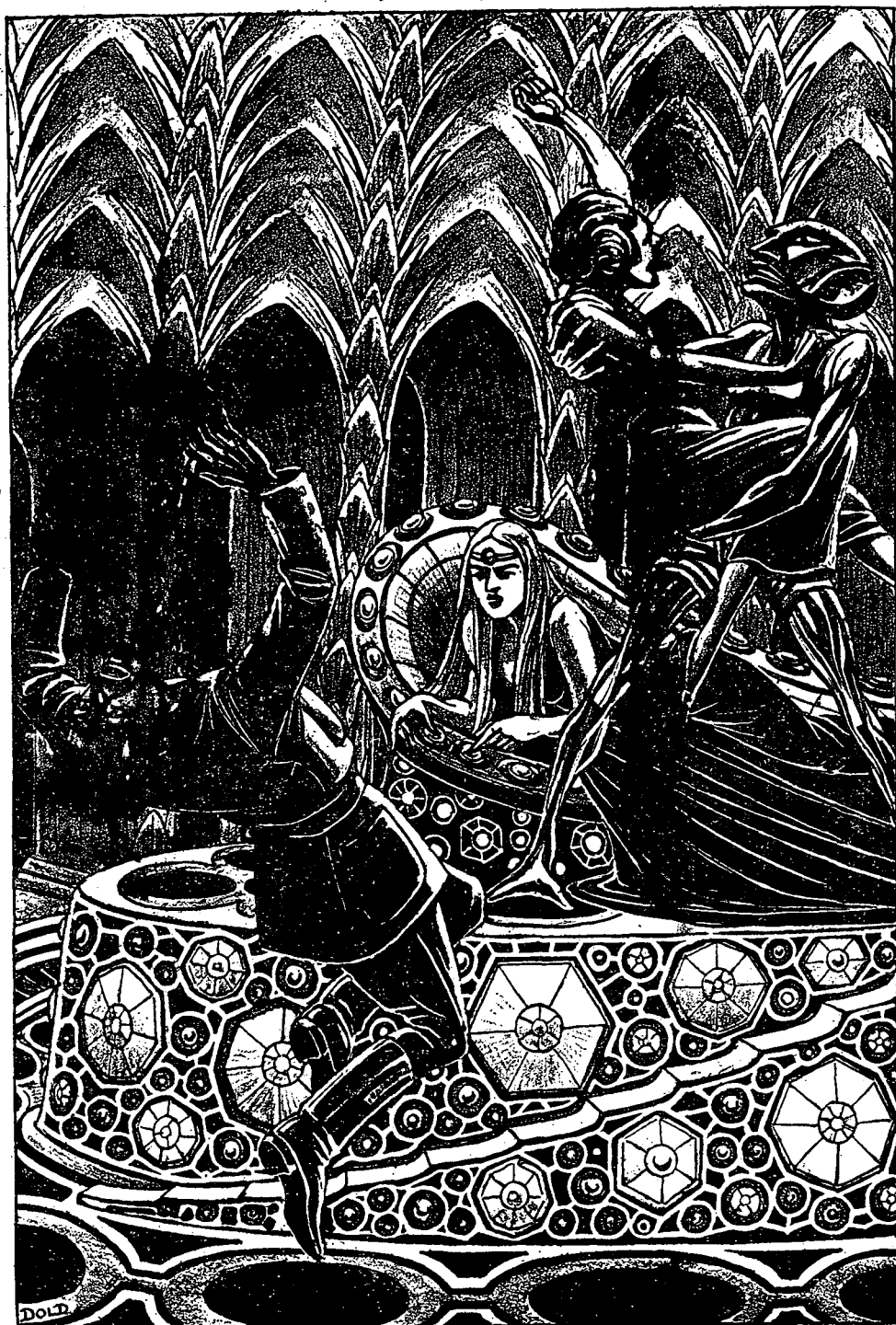
Both strange man and monster are gone when Katharine finds Driggs and revives him. But beside the three-toed marks is a locket holding a blue jewel. Driggs, looking into the jewel, finds himself gazing into the eyes of an exquisitely beautiful young woman. At sight of Driggs her face hardens with anger. "Where is my messenger, Arkos?" she demands; then, changing swiftly, her smile becomes a welcoming caress. "Who holds the blue jewel of Dra Vongä," she whispers, "must come when Dra Vongä calls."

From another mountain Driggs sees the blue star come to rest on Tabletop, then Tabletop becomes invisible. Fighting his way back through the storm he finds that Katharine has taken the jewel for safe keeping and is now going toward Tabletop under the hypnotic spell of the jewel. Dra Vongä has called.

Behind a screen of invisibility Driggs' tent and possessions are destroyed in an instant of time. He rushes to Tabletop, but reaches there too late. Ahead of him is Kitten, but in whirling, quivering lines of nothingness she vanishes, staring at the jewel in her hand. And Driggs, staggering on, bursts through the same nebulous whirl.

Beyond it a great cylindrical ship rests on the rock. Monstrous, green-skinned creatures pour out from it. One seizes Kitten, but Driggs drops him with one shot. Driggs is firing into the horde when light flashes into his brain and he falls.

AST-5



*He started to leap—and yet in that second—— But was it
a second—or years——*

AST-6

PART II.

FLEETING dream figures came and went in Rance Driggs' mind—evanescent shapes, hardly distinguishable. A lethargy held him; even to open his eyes was too great an effort, and anything approaching conscious direction of thought was beyond his power. Dream figures—he wanted nothing but to lie on his bed, so soft he felt it not at all, and watch them come out of nowhere and go again while others took their place.

But there was one that persisted, a man, running, always running—and after æons of time it came to Rance Driggs that the man was himself.

Himself, running and falling and rolling to his feet—running down Black Mountain Trail—still running, staggering, gasping for breath, bursting out upon Tabletop—out where Kitten was going. Kitten's hair was blowing in the wind. She seemed such a little girl—

And, with that, remembrance came.

He lay quietly then, while long, timeless moments slipped by. His eyes were still closed, for he was remembering.

The ship, the horde of green, half-human things—yes, he remembered it all. And now ship and man-things would be gone. They would have taken Kitten—

He opened his eyes after a time, but had no consciousness of seeing, as if his eyes saw without registering on his brain. His mind was too full of dreadful certainty, and nothing else mattered greatly now.

Slowly he realized that he was seeing burnished metal—strange, coppery metal, mirror polished, reflecting obscurely in a dim light. He was lying on his back and the metal was flat and only two or three feet above him.

He turned his head to the right with a sudden, jerking movement and saw another wall of metal. Little spots of

light in the wall glowed like phosphorescence; the glowing was the source of the dim illumination in this metal cell.

But an odd thought was hammering at him. Whatever he was lying on was so soft he did not feel it; and he had felt nothing when he turned his head. Suddenly he knew that there was nothing there.

He whipped his arms beneath him, and felt with his hands for something solid, but found nothing; and a strange feeling of helplessness filled him. He was cut off from everything tangible; his body was weightless; he was floating in air. The sensation was not pleasant.

The wild throw of his arms had set his body to rotating, although it seemed more as if he hung motionless while the walls revolved slowly about him. Another wall of burnished metal twenty feet away crept slowly into view; then Driggs struggled frantically to turn his body and twist his head about still further. For in the dimly lighted room, between him and that new wall of metal, the motionless figure of Katharine Putnam was floating.

She lay motionless in mid-air; she was on her side facing him, and her eyes were closed. One arm was curved down and away from her side, and the hand was bent limply at the wrist. Her other hand, too, seemed drifting away from her body.

Her brown hair was fluffed outward from her head, and an unseen current lifted the hair slowly, then let it down. The light material of her red frock moved in slow undulations. She was like a person submerged in water, drifting. There was no motion of breathing that Driggs could detect.

He did not call her or make any sound, but flung his arms about and twisted his whole body in futile writhing, until at last he felt solid metal beneath his feet. His first pressure against it launched him out through the air. He

was like a swimmer under water. One of his hands touched her face, and the face felt warm; then he caught at her shoulder and his arms went about her and drew her to him.

HER EYES opened wide at his first touch.

"Why, Rance!"—she spoke breathlessly, with the startled surprise of a person just awakened—"I thought you had gone to the Minarets!"

Her eyes looked past him. "But this isn't the lodge!" she said. "I was at the lodge—I was in my room——" Her arms closed convulsively about him, and one hand gripped at the cloth of his coat and tugged at it.

She said in a tight, breathless whisper: "I—want to—stand up!—and I can't!"

She struggled for a moment until Driggs pressed her head back into the curve of his arm. "Take it easy," he said. "You probably don't remember anything after you left the lodge."

Her body was tense and hard under his hands, but abruptly it relaxed. She laughed, and her laughter was a soft, confident sound, and her eyes closed again.

"I didn't leave the lodge." She seemed whispering only to herself. "How funny to know it's a dream. Laugh, Rance—or aren't you here at all? Perhaps I'm just dreaming you, too."

Her eyes opened as Driggs' arms tightened. "I'm here," he said harshly. "We're both here. This isn't any——"

"It is!" Her voice was raised in sharp denial. "It must be!"

He felt her trembling then, though she lay very still with her eyes open wide looking above her. And after a time she said in an even, toneless voice: "I'm all right now, Rance. Tell me."

Driggs' teeth were making small grating sounds. The touch of the girl's trembling body, and the courage that

came and stilled that trembling and let her speak had unnerved him.

"That damned blue bubble!" he said. "You took it, Kitten. Then you looked at it this morning. Do you remember that?"

"Yes, I remember that—it was only a moment ago."

"And you saw Dra Vonga."

"Dra Vonga? I don't understand. I saw new lands, and strange places, and the weirdest animals. Then there was a big building made of many buildings all in circles about one central point, and, then—I woke up, Rance. Where — Oh, Rance, where are we now?"

Driggs still spoke grimly. "It wasn't just a moment ago," he said. "You headed for Tabletop after you saw those things—and a lot of things happened after that."

Gently he disengaged her hands. Their bodies had drifted near one of the metal walls; in this wall was a flat, circular section raised up from the smooth plate. Two more of the flat projections were in the wall; and in the adjoining metal at right angles to this wall another line of the round, raised portions showed—portholes, covered over, no doubt. Driggs, reaching cautiously, got his hand on the nearest one, and his fingers touched hand grips on its sides.

Katharine whispered once more: "Where are we?"

"This may answer the question," Driggs told her, "but let me say something first——"

"We haven't any weight, and there isn't any up or down to this place. Check? Well, it would be that way if we were floating in space. Not if we were driving ahead with accelerating speed, but if we were in a ship and that ship had shot out into space, then had shut off power and just kept on going because it was beyond the pull of the Earth. Does this sound pretty crazy, Kitten?"

"No," the girl said steadily, "I've known that from the first, just as you did, Rance. When we saw that blue star——"

Driggs said, "Sure; we both got it then. All right, let's see if this cover comes off."

HE TWISTED suddenly at the metal. His body swung around with the force of his effort, but the metal came loose in his hands. He pulled it aside and let go of it, and it drifted away. He found a convenient hand grip on the wall and clung to it. He was looking at the round circle where the metal had been. And he was staring deep into a night sky, of such blackness as he never before had seen.

It was almost tangible blackness. It had depth and substance until, without any preliminary gleaming, a point of light moved in from one side and pushed the darkness back.

Other stars showed. Their light was steady; they were points of pure brilliance against a background of utter black. Then, still without any warning or preparation, an unbearable radiance peeped from one edge and moved out until it was at the center of the round port.

Driggs clapped one hand across his eyes. He said, "Don't look at it! It's sunlight, polarized! Of course it would be like that—no diffusion!"

That light passed slowly, and other small pin points of hard brilliance pricked the black. Driggs was looking now at the lookout itself and the thickness of the wall in which it was set. There were two glasses and an air space between, but the metal wall itself was not two inches in thickness. The frame for the glass had even been built back into the room to get depth enough for the two pieces of glass.

Yet the metal wall was not too cold to his touch.

He said wonderingly, "What about

insulation against interstellar cold? This wall ought to be a foot thick, full of voids and air chambers and the best insulators."

He stopped and scowled at the thin wall and forgot that he was drifting in air. For just beyond that thin wall was no air. "It works," he said, "but it's contrary to every——"

Words ended as his body swung sharply sideways. Instantly he was clinging to the hand hold to keep from dragging away. The girl's body swept past him, but she caught with both hands at his coat, and he got one arm about her and held her, as the pull of new-found weight swung them against the wall. Abruptly the air of the room was vibrant with deep sound.

Driggs called out above the humming roar: "They're accelerating—or checking speed. We don't know which."

After a time he added slowly: "Space ships! They had to come some day—and this one has been to the Earth. Now it's going back—somewhere. I wonder where that is."

Outside the lookout stars had drifted in ever-changing succession. Slowly they dimmed as the black that held them took on a purple tone. That faded to gray. Always the pull on Driggs' arm increased as he supported his own and Kitten's weight.

Then his hand could no longer stand it. He released his hold, and they slid along the wall and came up heavily against the adjoining metal plates. They were even able to stand erect on those plates until again their weight changed and another of the metal walls became the floor. Then they stood on that, quietly side by side.

This floor held more of the lookouts, and Driggs unscrewed one of the caps after a little time and stood looking down. He did not speak.

KATHARINE PUTNAM moved over beside him. She, too, stared down

through the exposed glass; then she reached for one of Driggs' hands and held it in her own. Her hands were cold. "Those are the animals I saw," she said.

Land, heavily forested, was below them. It was only a couple of thousand feet down. The top of what was almost jungle growth made a floor of green, where great flabby leaves opened and closed rhythmically and long flexible tendrils as thick as Driggs' arm flung themselves in constant motion under a blazing sun.

Here and there were open spaces, and in some of them were huge beasts, shaggy-haired, long-necked. The beasts raised ugly heads and tore off great mouthfuls of greenery from the trees.

Then the forest ended and barren rocky ground drifted below, and at last a plaza of stone laid in intricate designs, and after that a golden glitter as of glass on a curving roof.

The ground below them seemed to fall away then, as the ship lifted. For a moment the two, who stared silently, saw three buildings forming concentric circles. Surrounding the outermost was the stone plaza, but between the ringed structures were purple lagoons. At the center of the circles was one round building under a dome, that shimmered in gorgeous display of opalescent tints.

Katharine Putnam drew in one long breath and breathed out again. She tried to speak, but no sound came; she wet her lips with her tongue and tried again.

"It is the building," she said huskily, "that I saw in the blue jewel. Rance—I'm afraid, terribly afraid."

Soft rumbling in the room had never ceased; it was like the faint thunder that had sounded over Black Mountain. Now that sound mingled with the rasp of metal sliding on metal.

Driggs flung one arm about the girl's waist and turned. A whole section of

one wall had moved back and made an opening to a larger room beyond. And in the opening was the huge bulk of the green man-thing that had snatched the jewel from Kitten's unresisting hand. The scar on his cheek was a pale, whitish line.

He gripped a slender tube of white metal in one hand, and held it aimed toward them, and his other hand steadied him against the wall. His eyes in that elongated head were slanting and held a cold, baleful gleam. He looked at Driggs, then at the girl, and his thick lips opened while he breathed heavily, but no sound came.

"The gentleman's name," Driggs said quietly, "is Arkos. Dra Vonga sent him. He's poison—he's the one who knocked me cold up by the spring—but Dra Vonga is just that much worse."

VIII.

THEY WALKED OUT into the sunlight side by side, out through the same doorway in the hull that Driggs had seen open on Tabletop. But, first, with the girl at his side, he passed through many compartments in the ship; then, where a big door had been unsealed and swung back, came the sunlight.

Green-fleshed figures followed them. The green men shouted, and the shouts were like coughing barks; then their voices rose up in shrill clamor through which ran an odd irregular rhythm. Swaggering ahead was Arkos, and he, too, made high-pitched, shrill sounds that might have been a song. Arkos led the way down to the broad plaza.

Sunshine flooded the level world; the sun was directly overhead. Many hours later Driggs was to note that it was still overhead, almost unmoving, but now he had time only for one quick glance; then they were surrounded by a solid mass of green bodies. The air was heavy with the pungent odor of them;

they stared from slitted eyes in elongated heads, and the sound of their voices was a bedlam of shrill cries and sharp, barking words.

Arkos bellowed loudly, and the mob fell back. A lane opened through the sea of green bodies. Then Arkos marched on, and the two captives followed while the rest of the ship's crew brought up the rear.

Driggs and the girl walked silently and each was careful not to meet the other's gaze. Here was a new world, and they were walking upon it. An incredible happening, yet now that it had happened the marvel of it was gone. They were here, and this was a hostile world. What might have been glorious adventure was something else—an experience of sheer horror, and through it all was a menace too indefinite to cover with words.

But Driggs touched her hand and took it in his, while he stared straight ahead. "We're bound for the circular building," he said. "Perhaps there's an answer to what this means in there."

"But what do they want of us?" Kitten's voice sounded as if her throat were cramped.

Directly ahead of them were walls of translucent blocks; the walls shimmered with soap-bubble tints under the sun. A great, arched entrance was built of opaque black jet. The lane through the living mass of green, naked flesh led to the arch. There, in the shadows of the black vault, tall doors of some purple, lustrous metal were hung.

Driggs said slowly, "I don't know the answer to that, Kitten. There's Dra Vonga, of course—you haven't seen her yet. She knows all the answers. But it's the Earth I'm thinking of. They've found their way there; they've got something brand new in motive power and weapons. And they've got this cute little invisibility trick, too. There's trouble ahead, Kitten."

They were at the doorway and the

purple doors swung open at the first touch of their shadows on the metal sill. Arkos stepped aside and motioned them in with a sweep of one arm. Sunlight made crinkling reflections on the transparent skin of his arm and glistened from the curves of his body. The pulling and knotting of every muscle was plain except in places where layers of whitish-green fatty tissue covered the darker flesh.

The two Earth folk had stopped. Driggs said softly, "Move over to my left side. He isn't exactly pretty, is he? But it looks as if we may lose the green devils here, and that's a help."

FOR A MOMENT Arkos' slitted eyes glared with repressed fury. His outstretched hand opened, then closed as if the long fingers were gripping something and crushing it. Driggs swung the girl across and brought himself between the girl and the ugly hand.

Katharine said, "He heard you! It was just as if he knew what you said!" Then Driggs drew her beside him as they passed the big, green figure and went through the entrance into cool shade.

Behind them was clanging sound as the big doors closed and left them in darkness. But in the brief instant of their closing Driggs saw that he and the girl were in a huge tunnel, and that Arkos had not entered.

At the left side of the entrance was a solid wall of black, but on the right side the tunnel swept smoothly away in a curve. The air seemed charged with electric force; their bodies tingled, and something unseen touched them with many tiny, prickling points.

Driggs whispered, "We're in a magnetic field of some sort." He remembered the circular buildings they had seen from above, concentric structures, and the center of them all a high, gleaming dome, and he added:

"This is the outside building, Kit-

ten; and it's hollowed out into a big tunnel. Wait—it's getting light!"

Softly the smooth walls took on a gleaming, and the first glow gave way rapidly to definite lines of yellow light that ran around the big tube. Where they stood was a flattened portion like a walk that curved away at the bottom of the cylindrical tunnel, and the lines of light were blocked off where they passed under this. The lines grew to brilliant yellow, but gave off no heat.

"Cold light," Driggs said, "and we are in the center of a coil. See; that is a winding around this hollow core."

He was looking directly above. Katharine, facing ahead where the tunnel curved away, exclaimed: "A light, Rance—up ahead; it is forming in the air." Some ten feet away at the center of the tunnel a single point of blue brilliance was growing.

It moved away from them at once, floating slowly in mid-air. Driggs suddenly was toppling toward it. He took one step, and stopped to lend a steady-ing hand to the girl who had almost fallen, then again his body swung ahead, and he was forced to move his feet to keep erect.

They walked slowly, always at the same distance from the blue light, and no strength in their bodies could have kept them back. Once Katharine, staring in fascination at the light, stumbled and fell. Driggs reached for her and was overbalanced by the forward pull on his body. He toppled at her side, then felt the scrape of the smooth walk beneath him as their two bodies slid along, drawn inexorably after the blue light.

They got to their feet and walked, taking the pace of the silent guide ahead. The girl was trembling.

Driggs said: "It's a big solenoid, and it's pulling us along—does that make it any easier to take? No, I don't know what the blue light is; that's a new one. Neither did I ever see a solenoid that

would pull flesh and blood along, but this one does. And we've about gone around the whole circle now."

The gleaming lines wrapping the tunnel went black as he spoke. At the left another passageway beckoned with soft purple light.

Driggs said thoughtfully, "Suppose we went back. I wonder——" He turned and took three steps into the dark. Abruptly the lines of light were shining again, and this time with furious heat.

Instantly he was at the center of an electric furnace. He threw one arm across his eyes and turned and leaped back.

Katharine was running. "The passage!" she called out; then the cool purple light infolded them.

Driggs took his arm from across his eyes. "I think," he said, "that I'll be good now and go where I'm told."

IN THE NEXT circular building the same windings of light surrounded them, but now the lines were wrappings of red.

Again the blue light formed in mid-air and led them on, but now there was sound—it seemed as if the cold blue flame, moving like ghostly fox fire ahead, was laughing. Certainly laughter came from the center of it, soft, throaty laughter that might have been still warm from a woman's lips. But a note of mockery ran through it.

They completed the circle of this second building, and again a cylindrical passageway formed an exit leading always toward the center. Its curved walls were smooth as glass, and they glowed with—a purple light that was bright overhead and grew darker purple toward the bottom of the passageway.

Driggs said, "There's nothing else to do. I wonder what it's taking us to," and led the way into the passageway.

Halfway through Katharine's voice:

stopped him. "It's water!" she said. "It's a tunnel through water! We saw purple lagoons, you remember, between the buildings."

She moved quickly to one side and touched the smooth, curved surface. She even pressed her hand into it and drew her hand out again and left the surface the same as before. But her hand was wet.

She said in a thin voice: "Cold light! And laughing flame! Now a wall of water that doesn't fall in and drown us! Where does science end and magic begin?"

"It doesn't begin," Driggs said grimly. "The same current that induces that blue light could carry a voice; we've had our talking lamps, you know."

"And this——" He pointed to the smooth, cylindrical walls, then stuck his hand into the purple translucence and withdrew it as she had done. "We've learned about heavy hydrogen and heavy water. Why not a new stunt—water of still a new kind with a new surface tension and air pressure enough in here to hold it out? Anyway, there it is; we can't laugh that off."

"But don't forget this, Kitten; these coils we've walked through are part of something big. They weren't put here just to impress us. Perhaps when we find what this whole thing is——"

"Let's get it over with," Kitten said. "There were three circular buildings, then the center; that leaves one more." She turned and touched Driggs' hand lightly with hers, and they walked side by side into the third tunnel, where darkness gave way to a mingling of red and yellow flames that flickered over the walls and a mocking blue light moved smoothly ahead.

They went on until another cross tunnel with curved walls and the same curved roof of water took them to a place filled with darkness as black as the black skies of space, and they knew they were at the center of the triple ring.

Sounds came out of the darkness—little, furtive sounds: the soft slide of naked feet on stone, breathing, noises almost indistinguishable, that were sensed more than heard. The two were gripped in sudden, breathless waiting—until light came.

It came afar off, as if at the end of a great room. It rose up in blue tongues of flame from the floor, and the flames quivered and vanished and came again among murky clouds.

They mounted higher; then the light of them swept out across the room and showed a great throng of green-bodied things standing motionless, each with one hand pressed in salute just above the eyes in its bald, pointed head. With the coming of the light the green throng raised its mob voice in a resounding, groaning: "O-o-oom! O-o-oom!"

DRIGGS looked swiftly about. He and Katharine were standing on a jet-black floor, but the black ended twenty feet away and changed to a red and white checkerboard pattern. Out there on the checkerboard floor the grotesque horde stood and stared toward the far side of the room and the leaping flames.

Driggs' hand closed down hard on the girl's arm. "Dra Vonga," he said softly; "she'll be up there." He was looking toward the flames and a platform raised above the level of the floor.

Katharine whispered, "I'm watching, Rance," then abruptly both were staring into whirling space where there was nothing at all.

Here was the same invisible whirl of nothingness that had been on Tabletop and that had served to cover one brief instant of destruction in Rance's clearing. Now it swirled about them, and Katharine gripped at Driggs in sudden terror.

"What is it!" she gasped.

Driggs bent toward her. "I said it was good," he whispered; "I said it was

a cute trick." Then the quivering whirl was gone, and the sound of his whispering ended.

He moved his head up sharply. He said, "Dra Vonga," in a hushed, almost soundless voice, and stood very still.

Light had come in a sudden, mellow burst, pouring down through a great iridescent dome, high above. The dome was mounted on walls of wood—heavy brown timbers covered over with a tracery of some unfamiliar metal, lustrous white.

The metal was wrought into vine-like growths that sprang upward from the floor and flattened their convolutions against the walls. The light showed it all in soft glowing, but the light was flooding an empty room; the great hall, where a throng had been only an instant before, was empty.

But across the wide room, where a platform was raised above the floor and shone with the gleaming of many metals, was a solitary figure—Dra Vonga.

She lay as Driggs had seen her once before, half reclining on the jeweled divan; and again the folds of her silken scarf clung to her beautiful, young body, concealing, yet only heightening her allure. She had been looking down; now she raised her head, and across the width of the hall her violet eyes sent one expressionless glance.

Katharine found her breath with a little rush of words. "How utterly, gorgeously beautiful!" she breathed. Then in quick reversal: "No! She's horrible! She's hateful and cruel——"

Far across the room the graceful figure on the divan moved languidly. Her lips parted. "Come nearer," she said.

Her voice came to them clearly, although she spoke in a casual tone, and the sound of it and the Earth speech in this place was something that was beyond belief. Each word seemed to strike with a physical blow.

She spoke again while they stood unmoving. "Kit-ten," she said, and broke

the word into two and in some obscure way made it something ugly, "come near; I would see this Kit-ten who dares to speak so of Dra Vonga."

IX.

THEY crossed the room—an interminable distance—and stood at last before the glorious figure. And through all the long journey across the room Dra Vonga's eyes regarded them from beneath long lashes, but no flicker of expression crossed her face.

Colors made riotous display through this end of the room. The platform, built three feet above the floor, curved outward at the front, and the front face was a maze of jeweled lines in prismatic gleaming. The surface of the platform, too, was brilliant, for woods of every conceivable hue had been formed into complex patterns.

But the sinuous, colorful lines of the woods were pierced with circles of the same black flooring as that at the entrance of the room. A row of these black disks, each a foot across, followed the curved front edge of the platform, and larger ones were irregularly spaced. Where Driggs and Katharine stood, too, was a band of the same black, before the platform.

Dra Vonga's eyes were just level with their own as she lay indolently at rest. Her head was supported by one hand and her arm was crooked against an arm rest; her other arm lay along the back of the jeweled divan and the fingers of that hand toyed with a row of gems like pigeon's-blood rubies along the back of the divan. Her eyes fixed on the Earth girl in languid disdain, but Driggs diverted her attention for a time. Her cold contempt made him lash out in sudden fury.

He said, "You are Dra Vonga. I am Rance Driggs, and this is Katharine Putnam. We are here because that ugly brute Arkos brought us, and he



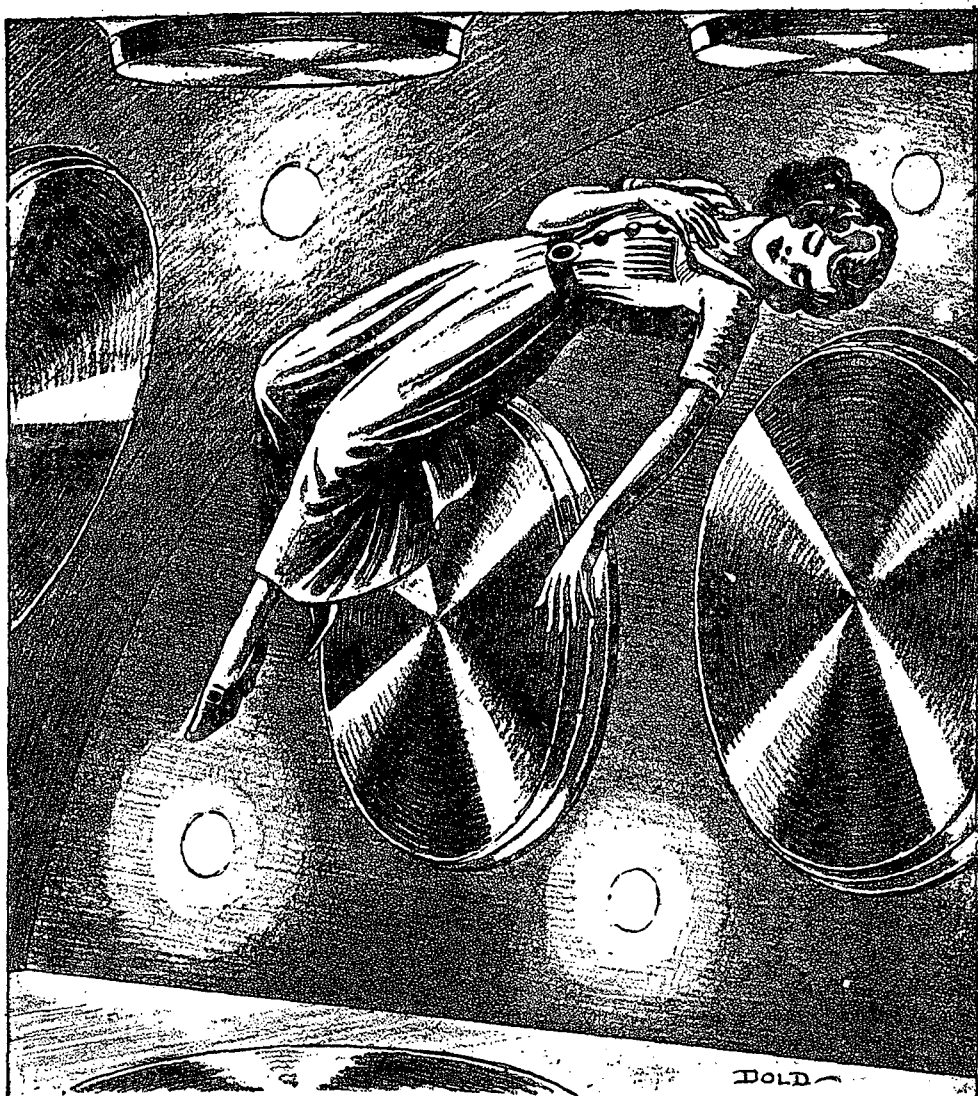
A sudden feeling of hopelessness came over him. He was weightless!

did that because you told him to. I don't know how in the devil you come to be talking our kind-of talk, but at least it will let you explain a few things. Where are we? What's all this about? What's the idea?"

For an instant the lovely eyes of Dra Vonga came angrily to life. She leaned forward and spoke through lips

drawn tight. "I could destroy you—like this——" One of her slender hands made a quick movement toward Driggs, and both he and Kitten jerked under the impact of some force that touched them, then was gone. "I could send you to Grokara and throw you to the *karanas*."

"You're just full of good ideas."



*She was like a person submerged in water,
drifting, beautiful—*

Driggs said. Dra Vonga's anger had been turned from the girl, and that was all he asked.

But Dra Vonga leaned back then and her face softened. She smiled, and the smile was wholly for Driggs. It was not a smile that one woman would have for another.

Dra Vonga drew a fold of golden

silk part way to her throat, then let her hand rest there and rise and fall with her breathing. "But I would not do those things, Rance Driggs," she said softly. "I would not be unkind—to you."

She spoke with a little indefinable accent, and she put only the slightest stress on that last word. But she looked into

Rance Driggs' eyes with her own glorious violet eyes wide.

At Driggs' side Katharine Putnam stirred, and Dra Vonga's gaze shifted to her.

Driggs asked hastily: "Where are we? How did you learn to speak——"

DRA VONGA'S hand moved, and again it seemed to Driggs that he felt the force of it. "You are on the little world of Xandros," she said evenly and without shifting her expressionless eyes from the girl. "And I speak the language of your Earth because I had only to look into my great blue sphere and the knowledge was mine, as all knowledge is mine. And now you will be silent, Rance Driggs, for I would speak to this Kit-ten."

She ordered Katharine to mount by a little stairway of brilliantly hued steps, then told her: "You will stand there," and pointed to the exact center of one of the black disks in the floor.

Katharine's poise had returned. Without flinching she endured the cold, appraising scrutiny of the woman before her. Yet she must have read the menace in those eyes.

Dra Vonga spoke musingly to herself.

"He looks at you, this Rance Driggs, and there is love in his eyes. Love—it has been long since I have heard the word. A hundred of your Earth years have passed since Du-vor told me—but that is done."

Suddenly she turned and hurled quick words at Driggs. "This Kit-ten is only an Earth woman. There are many, are there not?"

Driggs said dryly: "Not like Kitten. I've been learning that."

"You will forget it," Dra Vonga said quietly.

She moved the hand that rested on the row of rubies, and, as if in answer to a signal, the big green figure of Arkos came from a distant archway, one of a

series of arches at the back of the platform, and crossed the room, mounted the crimson steps to the platform and stood at Katharine's side.

Driggs seemed to shrink back slowly, but it was only the tightening of his muscles and a shifting of weight in readiness for a quick move. Dra Vonga paid no attention to him, but looked at Arkos. The huge, indecently flayed body towered above the girl who drew slowly away.

"See that she does not escape," Dra Vonga said; then action came quickly on the sound of her words.

Kitten sprang as Arkos' long arms whipped out. The arms caught her in mid-flight and held her. In that same moment Driggs' tense muscles let go.

He leaped to the platform—or he began to leap, but the platform and all who were on it vanished in the moment while he was in the air. Whirling lines, invisibility—yet he felt his feet strike on the wood, and knew that the platform was there. Then the whirl of lines was gone.

And though but a second had passed, Katharine Putnam was no longer there, and Arkos, too, was gone. Only Dra Vonga lay back indolently on her divan and smiled up at him.

"Rance Driggs," she said, and looked at his crouched, khaki-clad figure, "your courage is adorable—but so futile."

Driggs said hoarsely, "You she-devil, if anything happens to Kitten I'll——"

Dra Vonga laughed. "A thousand times I could have had you killed," she said, "while you were rising from the floor."

DRIGGS forced himself to steadiness. He did not know what that meant, but somehow he knew that Dra Vonga was speaking truth. He fingered the empty holster at his waist, but his gun had been taken from him and he was helpless. Then slowly he straightened, and his tensed muscles relaxed. He

would have to play Dra Vonga's game.

"All right," he said, "you could have had me bumped off; I'll take your word for that. But you didn't. And that leaves us right where we were, except for Kitten. Now I want you to get me straight on this: you pack an awful punch, and you're pretty as a picture, and I'd hate not to be nice with you. But if you try to put Kitten out of the way I'll raise forty kinds of hell around here before I get mine."

Dra Vonga looked at him steadily, but at last she smiled. "You use such fun-nee words, Rance Driggs, and some of them I do not know, but I know what you mean. No man of Xandros could talk so to Dra Vonga and live—but no man of Xandros is like you, Rance Driggs."

She was fingering the rubies that were part of the pattern in the back of the divan when sound came from one of the arches beyond. Again Arkos appeared, coming from the third arch from the end.

Dra Vonga spoke to him in words Driggs could not understand; but she told Driggs with a casual sideways glance: "Kit-ten does not die." Then, as Driggs' lips opened, "The word of Dra Vonga is—the word of Dra Vonga," she said.

And after that Arkos saluted by touching his hairless green head with the back of his hand and went back through the third arch from the end—Driggs noted that carefully.

Dra Vonga, too, watched Arkos as he left the room. Then she looked up at Driggs, and her hand that had held the filmy silk to her throat fell away.

Driggs said abruptly, "You sent a ship to our world. What else are you planning to do? And where do I come in on that? Why did you bring me here?"

She was looking at him now through her lashes, and she answered him only with a question.

"Am I—beautiful, Rance Driggs?"

And Driggs, looking down at her, could find but one answer. "You are the most beautiful woman I have ever seen," he said.

Dra Vonga smiled. "Now I will answer your question," she told him. "I brought you here, I think, just to hear you say that. And, Rance Driggs, to do one more thing: to make you master of your own world."

"Sure," Driggs said, "just like that." He smiled, but Dra Vonga seemed not to hear.

"I am weary of this little world of Xandros," she said, "and Grokara is only fit for my green ones and the *ka-ranas*. But yours is a good world. And, when we tire of that, perhaps there are more."

Driggs said dryly, "That's what I would call an ambitious program."

Dra Vonga looked up at him then, and her lovely eyes under the soft glow from the dome above, were again violet pools, which her long lashes only half concealed. She said: "You have much to learn, Rance Driggs," then extended her hand.

"I will arise," she told him.

Her hand was soft and warm in his. She stood at his side for a moment before she drew her hand away. "So much to learn," she repeated softly, "of Dra Vonga and the blue magic. Still, you have learned already to say that Dra Vonga is beautiful, and that is enough for now."

She stepped back and rested her hand on the back of the divan. And instantly there came about Rance the quivering which was now so familiar a sight.

IT LASTED A MOMENT, then was gone. And where Dra Vonga had stood was a nearly naked, bronze-skinned man, and, behind him, one of the green ones who looked at Driggs steadily from squinted eyes. But the

man, very much like the one Driggs had seen so long ago on Black Mountain Trail, bent his head humbly.

"You weel come—weeth me." He spoke slowly as if fumbling with unfamiliar words, and his voice was pitched very low. "Because I have learned—your talk of the Earth—I am honored. Come."

He turned and walked down off the platform and waited on the empty floor below. But Driggs stood for one moment glancing about.

In his own ignorance lay his helplessness. Dra Vonga was right—he had plenty to learn. And now Kitten was gone; and Dra Vonga, with more of her damnable magic, had vanished.

The green guard moved up close. He had a white metal tube in one hand. Driggs' shoulders moved in a despondent gesture. There was nothing he could do when mystery enveloped him on every side. He turned and crossed the platform with its inlay of brilliant woods, and the green guard followed; then he went down where the other man waited.

The man's skin was bronzed as if he had spent his whole life in the sun, and he was naked except for a wrapping of coarse red cloth about his hips. But he was human; he was a man.

He stood with his head humbly bowed until Driggs drew near; then he led the way across the broad room beneath the flooding opalescent glow from the big dome overhead. Driggs' boots pounded noisily in the silent room.

An arched entrance opened upon a bridge that seemed cast from one piece of the jet-black glass; the bridge was above a purple lagoon. They passed through the three circular buildings, but were at a higher level and crossed above the buried coils.

Alternate passageways where more green guards watched them from slanting eyes; and bridges of black above purple waters—a straight entrance in-

stead of the tortuous route he had followed before.

But Katharine Putnam had been with him then; and, despite all their fears, they had thrilled to the adventure of it all. Now she was gone; and to Rance Driggs was coming swift realization that he and Kitten were facing something of desperate danger—something where Earth knowledge was of little avail.

X.

DRIGGS sat on something like a sofa, wrought of strange, colorful metal, and the sofa was in a room whose walls were like translucent opal a foot thick. A metal door in one wall was swung open, and just outside the doorway a green bush with thick, fleshy leaves opened and closed its leaves as if they were fingerless hands.

Each leafy hand, when it was open, was like a cup, and in the bottom of the cup a red flower glowed like a fiery coal.

Something like a bird, but with transparent, striated wings and a body of black leather, came and hung quivering in the air. It uncoiled a long, leathery beak and shot it into the center of an open flower cup and jerked the beak back before the cup closed. It repeated this, timing the darting beak to the rhythm of the pulsating green leaf that was like a hand. Abruptly, much like a boxer outguessing his opponent, the hand changed its rhythm and clamped down on the leathery beak. It did not open again.

Another green cup with a red ember glowing inside came and closed over the whirring wings and the madly whipping body of the bird, and the bird cried out once. Then all the green leaves closed and folded in until the whole plant was only a ball, a foot and a half in diameter.

The ball rolled away, and Driggs watched it go. It stopped once and hesi-

tated; then, as if it had caught a scent, it started off directly up wind, pushing itself along with its green hands.

Driggs said, "What a swell place; just full of nice, damnable little things!"

But across the room the sun-bronzed man who had brought him raised his head and said, "I am so sorry—but I do not understand—you use new words."

Outside the doorway where the sun flooded a strange world with unceasing brilliance the green guard came and peered in at Driggs. There was no other exit from the room, and he turned away again.

Across the room the man rose from his position against the translucent wall, crossed the room silently to the doorway and looked out. Then he came back and stood before Driggs. He spoke in a low tone, but his voice was tense with emotion.

"Once I was king—ruler of all Xandros—but now"—he hunched his shoulders and looked at the floor while he spread his two hands out flat with the palms down—"I am nothing. Yet my life—Rance Driggs—is yours—for you saved Fozan."

"Fozan?" Driggs queried. "I don't get you. But I guess there isn't much of anything you can do." Then he asked again: "Who is Fozan?"

"My son," the man said, and moved to the door.

Driggs watched him listlessly. With that green giant on guard there was nothing he could do and no help this man could give him. Yet always he was remembering that Arkos had come and gone by the third archway from the end. Where did it lead? Had he taken Kitten through there?

His thoughts ended, and he straightened out of his despondent attitude at sight of a second figure in the doorway, another of the bronzed men with the mane of brown hair that seemed common to the race. But this man's body

had been scratched by thorns, and many white, seared lines made marks on his flesh as if hot wires had touched him.

Driggs looked at the calf of the left leg and saw the crisscross of partly healed cuts where his knife had slashed at the marks of a rattler's fangs. How long ago that seemed, that morning on Black Mountain Trail.

"My son, Fozan," the older man in the doorway said. "He did escape—on your world—and you saved him—but Arkos took him to the ship."

Driggs looked again at the man white, seared lines on the man's body. "It might have been better," he said, "if I had let the poison do its work."

Fozan's eyes showed that he understood, and suddenly Driggs rebelled against the mystery of it all. He was so damnably helpless.

"How in the devil do you folks know this kind of talk?" he asked harshly. "Do you look into a big blue ball like Dra Vonga does? Do you know all the answers, too?"

The two in the doorway exchanged frightened glances at sound of Dra Vonga's name, and out in the sunlight beyond them the green guard came and looked in at the door. Then, when the guard had gone away, Fozan answered, but he spoke as haltingly as his father.

"Du-vor," he said, "talks Earth talk."

Driggs said in a tired voice: "Du-vor. All right, what's that? Some new kind of deviltry?"

But Fozan simply answered: "Du-vor—is the one who flies."

Driggs didn't get it at once, not the full implication of it. Then he came slowly to his feet as if invisible wires were lifting him, and the color faded out of his face and left the tan like a brown stain on his bloodless cheeks. He spoke, and seemed to have as much difficulty as Fozan with his words.

"Duvore," he whispered, and brought the two syllables into one word, "where

is Duvore? I—would like—very much—to see—the one who flies.”

THEY passed through many miles of strange forest, Fozan leading the way, with Driggs following close, and the green guard bringing up the rear. Enormous trees crowded glossy-black trunks in eternal fight for life, and above was a solid roof that left only darkness below. Narrow paths threaded their way among the trees and vanished in deep gloom, though here and there sunlight tore through the leafy roof and made islands of light.

Vines hanging from that high roof writhed endlessly in the gloom of the lower world, or raised thick, bulbous ends like heads; then, as if they were sentient, living things, they drew back at the approach of the men.

Fozan paid no attention to them, but to Driggs the sight was ghastly and repulsive, and he was remembering the waving, restless treetops he had seen in serpentine life. Yet even so he could not move through this magnificent stand of timber without admiring it.

They passed buildings now and then—villas, lovely, soft-toned, sprawling structures with translucent walls, scattered singly or in twos and threes throughout the forest. Fozan's father's home had been like that, too.

Men like Fozan came from the houses and started toward them, but drew back at sight of the green guard. Women, many of them beautiful, with skin almost as lovely as Dra Vonga's, looked at Driggs with pitying eyes.

At last they came to a place where the forest ended in a sheer two-hundred-foot wall of green.

It was a living wall, for the limbs of the trees moved restlessly, and vines with blunt heads were constantly seeking, seeking. But Fozan stepped through and out from the forest upon a great plain of red rock.

He waited there for Driggs to come

up, then pointed. And Driggs, staring far across the bare rock, saw, a mile or more away, a gleaming of great copper cylinders.

They walked across the expanse of red rock, while sunshine beat upon them and their shadows, moving like pools across the red rock, took on the color of old blood.

The cylinders grew large as they drew near. At close range they became smooth metal with the rich sheen of new copper and took on enormous proportions.

Driggs counted five of the ships spaced evenly in a row across the red rock. They seemed ready to leap, and the Earth man saw all too plainly where that leap would take them—far off through space where a helpless world would await.

Men of Fozan's race, wearing red loin cloths, swarmed about the craft, and green guards like the one following Driggs circled the throngs of workers. Other green giants, their pointed heads all of two feet above those of the men, moved watchfully among them.

Strangely there was little sound. Voices made a hum as of bees swarming; occasionally there came a shout. But no clang or pound of metal came to Driggs, though the work was being pushed hard, as he could see.

Mountains walled in the red plain on one side; the rest of the way the green of the forest walls inclosed it. At one point, above the trees, the opal dome of Dra Vonga's temple showed in the sunlight.

FOZAN swung off to the right, keeping outside of the outermost guards, but Driggs said, "Wait!" then stood still, staring off at the gleaming roof; and after that he looked intently at the row of ships. Dra Vonga had intimated that there were big plans afoot—he must learn about those plans. He turned and went where Fozan was waiting.

Fozan moved on toward a long, low

building, built apparently of the same coppery metal as the hulls of the ships. Windows made dark rectangles in the buildings, and in the nearer end was a door. Fozan was only twenty feet away, with Driggs beside him, when the door opened and a figure appeared in the doorway.

It was a slender figure—a man wearing the red waistcloth of Fozan's race. But in all else he was different. His skin was tanned by the sun to a paler brown. His hair was black and cut so short that it made a stiff pompadour on the top of his head. He had a closely trimmed mustache and a beard.

He stood for a moment in the doorway looking back into the building, and Driggs saw that one of his hands was withered. It hung at his side; and clear to the elbow it was like the hand and arm of a mummy. Then the man turned, saw Driggs, and raised his other hand and clapped it against his mouth.

A peculiar gesture; it seemed almost as if he were holding back an involuntary cry.

Fozan took one forward step. He said, "Du-vor—the one who flies, here is——" then he stopped.

In the doorway the dark, slender figure flung out its one good hand and for one long minute the man's lips twisted silently, while he fought to call out and could not. Then: "Ah!" he cried in a terrible strangling voice. "*C'est un homme! C'est un américain!*"

XI.

HE sprang forward after that and threw his one good arm in a wild embrace about Driggs' shoulders. "*Un américain!*" he sobbed.

Driggs could not speak. He had expected this, yet somehow there was still shock in the actual seeing of the man. And he was looking past him, too, at another cylinder of metal.

AST-7

This was smaller. Its plates were of steel that had rusted red-brown, and they were riveted instead of being all in one piece like the monster hulls beyond. It was tiny and crude, yet plainly the huge ships had been modeled from this. Then Driggs understood.

He said, "You are Duvore, the one who flies. And you came here in that! Why didn't we know? When did you come——"

"*Vraiment!*"—the little man had found his voice again, although it was still shrill and cracking with excitement—"I am M'sieu' Duvaurier, and of a truth I came in that little ship. From Ardois in *la belle France* I came. It is that I have been here more than a hundred years of time. But you—you, m'sieu'!"

He held Driggs off at arm's length. "How came you here?"

Driggs shot one quick glance about. Many were watching: smooth-faced, gentle-eyed men with red cloths about their waists, and green guards here and there. Two green figures had followed Duvaurier and watched him closely. But none was near by. Driggs whispered fiercely:

"Listen, man, for Heaven's sake! There's a girl here, too. Dra Vonga's got her. Can we get away? Can we escape from this damned place?"

Duvaurier's hand fell heavily to his side. The luster went from his eyes and his thin shoulders sagged. He said:

"For a moment I dared to hope—I dared dream of release! So long have I waited. But you, too, are captive; you, too, are only her slave!"

Driggs put all of his pent-up desperation into his whispering voice.

"Forget Dra Vonga! Tell me——"

Duvaurier's hand came up in quick protest. His face paled, while his eyes widened with fear.

"We of Xandros," he said in a scarcely audible voice, "*nevaire* forget Dra Vonga."

Then as the green guards barked excited sounds, Duvaaurier said, "They know not many of the words, but we must be calm or they will send for her. And oh, *mon ami*, there is no hurry; we have so much time, you and I. Come; I will show you my ships."

THEY WERE inside the finished hull of a great ship. About them men of a strange race worked with feverish haste, or consulted drawings with Duvaaurier's scrawled signature, then put struts or big diaphragms in place and fastened them with a syrupy, copper-colored liquid. After a time the liquid turned to metal, and the men rubbed it to mirror smoothness.

Green giants moved about the workmen, and Driggs' guard with the two who watched Duvaaurier stood at one side and exchanged guttural syllables. At one side Fozan waited near a gaping opening in the side of the ship.

Duvaaurier stood with one hand resting on a great central truss on which three radial cylinders were mounted, and regarded Driggs.

"Have you heard any of what I have said, m'sieu'?" he asked.

Driggs said, "I'll be good now; I'll keep my voice down. But I've got to ask questions. Time—that's the first one."

Duvaaurier said softly, "*She* is master of time."

"Whatever that means!" Driggs was speaking in a low, toneless voice, but there was still a hint of the repression that was needed to keep him from crying out: "They smashed my place on Black Mountain in half a second—they made it invisible, then smashed it. They took Kitten away behind the same damned quivering—all in an instant of time. Now you talk about a hundred years, and *she* made the same kind of a crack. Yet you aren't much older than I am, and *she*—"

"The physiological age processes run

slow," Duvaaurier told him, "though all else goes fast.

"Wait—I meant only that I had seen the equivalent of a hundred Earth years. I know not how to explain; I know only that it has to do with vibration within the atom—a tuning and change of electronic speed.

"But I know this, too: I know the time I have spent here and on their accursed Grokara. After that came my experiments which needed many more years, then the long time while I have built one ship and again working on these five that you see—thinking, planning, experimenting—making my drawings and instructing these so-ignorant men. Time spent bringing the green ones from Jupiter— Yes, it has been more than one hundred years."

"Jupiter!" Driggs exclaimed. "In Heaven's name, man—"

Duvaaurier brushed that aside with a wave of his hand. "Jupiter—that is Grokara. And Xandros is a satellite. Be thankful, m'sieu', that it is Xandros you are on and not Grokara."

Driggs put one hand to his head, then stood and looked stupidly at his hand. He said, "Grokara! Jupiter! Xandros!" but these were only words.

The green guards were watching again. Duvaaurier said with studied unconcern: "Let us speak of time. Tell me, m'sieu', on what date did they capture you on our good Earth?"

Driggs forced his staring eyes to focus on Duvaaurier's face. "June," he said; "June ninth."

"And the year?"

"Nineteen thirty-four."

DUVAURIER'S eyes were sad, and he seemed for a time to be staring through the hard metal of the ship and looking far into space.

"Truly," he said at last, "has it been more than a hundred years. Yet, behold, m'sieu', I left my beloved Ardois

in France on the night of *le premier mai*. And the year, observe carefully, was that of nineteen thirty-three."

Driggs said in a stunned voice: "One year!"

But Duvaurier said bitterly: "Time! What is that but our perception of the sequence of events. And *she*, by means of that machinery in the room beneath the temple, can control time. Her father, Dra Tor, invented those machines. but Dra Tor died many——"

"Stop!" Driggs spoke in only a whisper, but something in that whisper silenced Duvaurier like a blow.

"Machinery!" Driggs repeated. "Another room beneath that dome in the triple ring! She's got Kitten there, man—I know it! I——"

Duvaurier could not keep horror from his voice, and his eyes grew large and dark.

"Don't!" he said breathlessly. "I entreat you, do not go there! For see"—he held up his withered hand and arm which till then he had kept away from

Driggs—"the blue flames are in that place. Cold flames, but they did this to me! Pray, my friend, that you be spared——"

But Driggs' eyes were suddenly cold and entirely expressionless. His gaze passed over the intently staring guards and not a quiver disturbed his face. He looked about the interior of the big hull as if seeing it for the thousandth time. And at last he looked at Duvaurier.

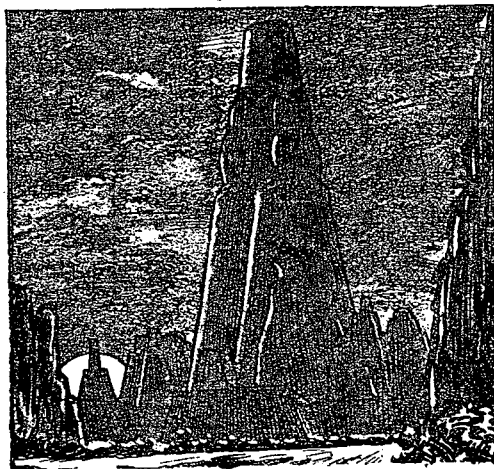
"The third arch from the end," he said softly. "Good-by; I'll be seeing you, maybe. If not—good luck!"

He turned then and walked toward the opening in the hull where Fozan waited, and put one hand on Fozan's shoulder.

"Keep Fozan with you," he called to Duvaurier. "I wouldn't want him to get into trouble."

Duvaurier was standing with one arm extended entreatingly, but he could say nothing. As Driggs moved out into the sunlight that flooded a broad, red plain, his giant guard was following him close.

To Be Continued.



The Fourth-Dimensional Demonstrator

*A delightful piece of
satirical fiction*

by
**Murray
Leinster**

PETE DAVIDSON was engaged to Miss Daisy Manners of the Green Paradise floor show. He had just inherited all the properties of an uncle who had been an authority on the fourth dimension, and he was the custodian of an unusually amiable kangaroo named Arthur. But still he was not happy; it showed this morning.

Inside his uncle's laboratory, Pete scribbled on paper. He added, and ran his hands through his hair in desperation. Then he subtracted, divided, and multiplied. But the results were invariably problems as incapable of solution as his deceased relative's fourth-dimensional equations. From time to time a long, horselike, hopeful face peered in at him. That was Thomas, his uncle's servant, whom Pete was afraid he had also inherited.

"Beg pardon, sir," said Thomas tentatively.

Pete leaned harassedly back in his chair.

"What is it, Thomas? What has Arthur been doing now?"

"He is browsing in the dahlias, sir. I wished to ask about lunch, sir. What shall I prepare?"

"Anything!" said Pete. "Anything at all! No. On second thought, trying to untangle Uncle Robert's affairs calls for brains. Give me something rich in phosphorus and vitamins; I need them."

"Yes, sir," said Thomas. "But the grocer, sir——"

"Again?" demanded Pete hopelessly.

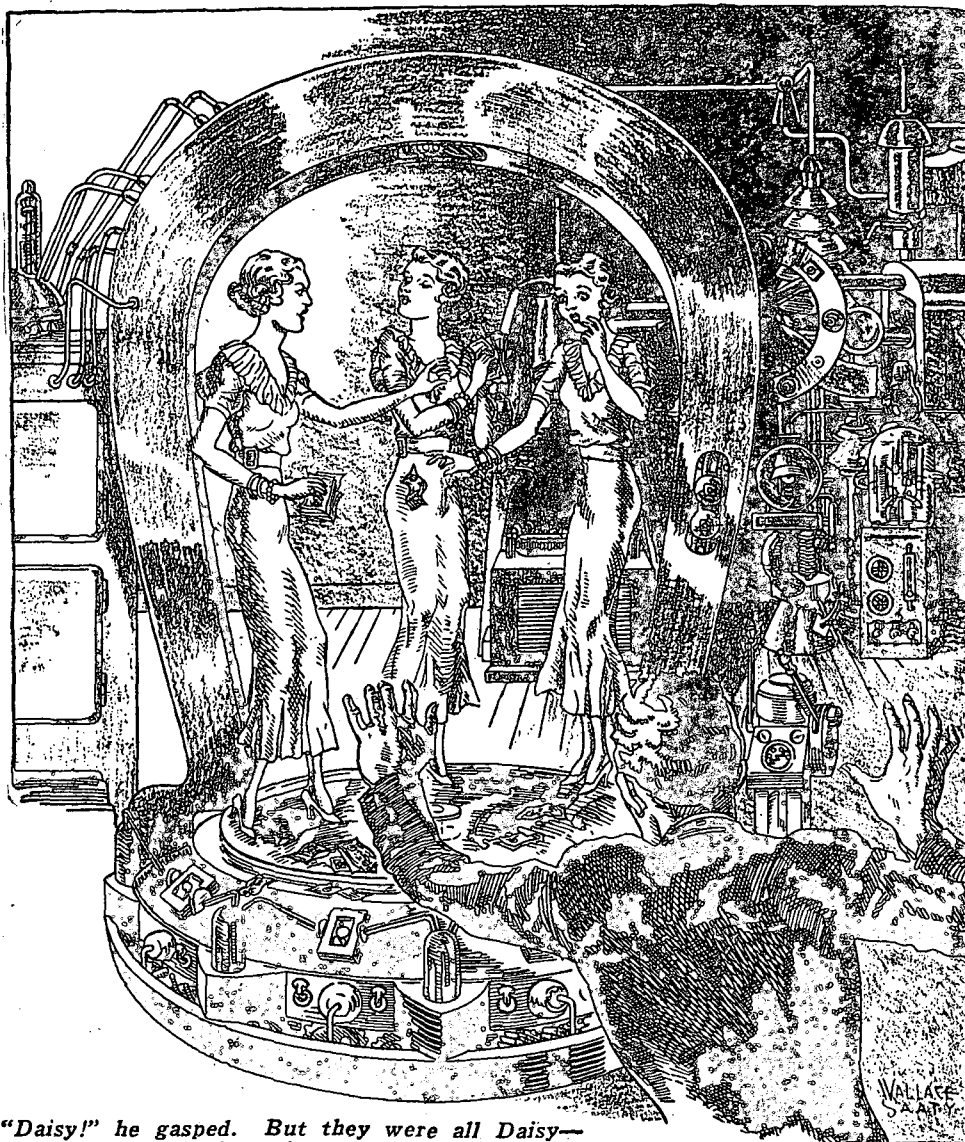
"Yes, sir," said Thomas, coming into the laboratory. "I hoped, sir, that matters might be looking better."

Pete shook his head, regarding his calculations depressedly.

"They aren't. Cash to pay the grocer's bill is still a dim and misty hope. It is horrible, Thomas! I remembered my uncle as simply reeking with cash, and I thought the fourth dimension was mathematics, not debauchery. But Uncle Robert must have had positive orgies with quanta and space-time continua! I shan't break even on the heir business, let alone make a profit!"

Thomas made a noise suggesting sympathy.

"I could stand it for myself alone," said Pete gloomily. "Even Arthur, in his simple, kangaroo's heart, bears up



*"Daisy!" he gasped. But they were all Daisy—
three, four—*

well. But Daisy! There's the rub! Daisy!"

"Daisy, sir?"

"My fiancé," said Pete. "She's in the Green Paradise floor show. She is technically Arthur's owner. I told Daisy, Thomas, that I had inherited a fortune. And she's going to be disappointed."

"Too bad, sir," said Thomas.

"That statement is one of humorous

underemphasis, Thomas. Daisy is not a person to take disappointments lightly. When I explain that my uncle's fortune has flown off into the fourth dimension, Daisy is going to look absent-minded and stop listening. Did you ever try to make love to a girl who looked absent-minded?"

"No, sir," said Thomas. "But about lunch, sir——"

"We'll have to pay for it. Damn!"

Pete said morbidly. "I've just forty cents in my clothes, Thomas, and Arthur at least mustn't be allowed to starve. Daisy wouldn't like it. Let's see!"

He moved away from the desk and surveyed the laboratory with a predatory air. It was not exactly a homy place. There was a skeltonlike thing of iron rods, some four feet high. Thomas had said it was a tesseract—a model of a cube existing in four dimensions instead of three.

To Pete, it looked rather like a medieval instrument of torture—something to be used in theological argument with a heretic. Pete could not imagine anybody but his uncle wanting it. There were other pieces of apparatus of all sizes, but largely dismantled. They looked like the product of some one putting vast amounts of money and patience into an effort to do something which would be unsatisfactory when accomplished.

"There's nothing here to pawn," said Pete depressedly. "Not even anything I could use for a hand organ, with Arthur substituting for the monk!"

"There's the demonstrator, sir," said Thomas hopefully. "Your uncle finished it, sir, and it worked, and he had a stroke, sir."

"Cheerful!" said Pete. "What is this demonstrator? What's it supposed to do?"

"Why, sir, it demonstrates the fourth dimension," said Thomas. "It's your uncle's life work, sir."

"Then let's take a look at it," said Pete. "Maybe we can support ourselves demonstrating the fourth dimension in shop windows for advertising purposes. But I don't think Daisy will care for the career."

THOMAS marched solemnly to a curtain just behind the desk. Pete had thought it hid a cupboard. He slid the cover back and displayed a huge contrivance which seemed to have the soli-

tary virtue of completion. Pete could see a monstrous brass horseshoe all of seven feet high. It was apparently hollow and full of cryptic cogs and wheels. Beneath it there was a circular plate of inch-thick glass which seemed to be designed to revolve. Below that, in turn, there was a massive base to which ran certain copper tubes from a refrigerating unit out of an ice box.

Thomas turned on a switch and the unit began to purr. Pete watched.

"Your uncle talked to himself quite a bit about this, sir," said Thomas. "I gathered that it's quite a scientific triumph, sir. You see, sir, the fourth dimension is time."

"I'm glad to hear it explained so simply," said Pete.

"Yes, sir. As I understand it, sir, if one were motoring and saw a pretty girl about to step on a banana peel, sir, and if one wished to tip her off, so to speak, but didn't quite realize for—say, two minutes, until one had gone on half a mile——"

"The pretty girl would have stepped on the banana peel and nature would have taken its course," said Pete.

"Except for this demonstrator, sir. You see, to tip off the young lady one would have to retrace the half mile and the time too, sir, or one would be too late. That is, one would have to go back not only the half mile but the two minutes. And so your uncle, sir, built this demonstrator——"

"So he could cope with such a situation when it arose," finished Pete. "I see! But I'm afraid it won't settle our financial troubles."

The refrigeration unit ceased to purr. Thomas solemnly struck a safety match.

"If I may finish the demonstration, sir," he said hopefully. "I blow out this match, and put it on the glass plate between the ends of the horseshoe. The temperature's right, so it should work."

There were self-satisfied clucking sounds from the base of the machine.

They went on for seconds. The huge glass plate suddenly revolved perhaps the eighth of a revolution. A humming noise began. It stopped. Suddenly there was another burnt safety match on the glass plate. The machine began to cluck triumphantly.

"You see, sir?" said Thomas. "It's produced another burnt match. Dragged it forward out of the past, sir. There was a burned match at that spot, until the glass plate moved a few seconds ago. Like the girl and the banana peel, sir. The machine went back to the place where the match had been, and then it went back in time to where the match was, and then it brought it forward."

The plate turned another eighth of a revolution. The machine clucked and hummed. The humming stopped. There was a third burnt match on the glass plate. The clucking clatter began once more.

"It will keep that up indefinitely, sir," said Thomas hopefully.

"I begin," said Pete, "to see the true greatness of modern science. With only two tons of brass and steel, and at a cost of only a couple of hundred thousand dollars and a lifetime of effort, my Uncle Robert has left me a machine which will keep me supplied with burnt matches for years to come! Thomas, this machine is a scientific triumph!"

Thomas beamed.

"Splendid, sir! I'm glad you approve. And what shall I do about lunch, sir?"

The machine, having clucked and hummed appropriately, now produced a fourth burnt match and clucked more triumphantly still. It prepared to reach again into the hitherto unreachable past.

Pete looked reproachfully at the servant he had apparently inherited. He reached in his pocket and drew out his forty cents. Then the machine hummed. Pete jerked his head and stared at it.

"Speaking of science, now," he said an instant later. "I have a very commercial thought. I blush to contemplate

it." He looked at the monstrous, clucking demonstrator of the fourth dimension. "Clear out of here for ten minutes, Thomas. I'm going to be busy!"

Thomas vanished. Pete turned off the demonstrator. He risked a nickel, placing it firmly on the inch-thick glass plate. The machine went on again. It clucked, hummed, ceased to hum—and there were two nickels. Pete added a dime to the second nickel. At the end of another cycle he ran his hand rather desperately through his hair and added his entire remaining wealth—a quarter. Then, after incredulously watching what happened, he began to pyramid.

Thomas tapped decorously some ten minutes later.

"Beg pardon, sir," he said hopefully. "About lunch, sir——"

Pete turned off the demonstrator. He gulped.

"Thomas," he said in careful calm, "I shall let you write the menu for lunch. Take a basketful of this small change and go shopping. And—Thomas, have you any item of currency larger than a quarter? A fifty-cent piece would be about right. I'd like to have something really impressive to show to Daisy when she comes."

MISS DAISY MANNERS of the Green Paradise floor show was just the person to accept the fourth-dimensional demonstrator without question and to make full use of the results of modern scientific research. She greeted Pete abstractedly and interestedly asked just how much he'd inherited. And Pete took her to the laboratory. He unveiled the demonstrator.

"These are my jewels," said Pete impressively. "Darling, it's going to be a shock, but—have you got a quarter?"

"You've got nerve, asking me for money," said Daisy. "And if you lied about inheriting some money——"

Pete smiled tenderly upon her. He produced a quarter of his own.

"Watch, my dear! I'm doing this for you!"

He turned on the demonstrator and explained complacently as the first cluckings came from the base. The glass plate moved, a second quarter appeared, and Pete pyramided the two while he continued to explain. In the fraction of a minute, there were four quarters. Again Pete pyramided. There were eight quarters—sixteen, thirty-two, sixty-four, one hundred twenty-eight — At this point the stack collapsed and Pete shut off the switch.

"You see, my dear? Out of the fourth dimension to you! Uncle invented it, I inherited it, and—shall I change your money for you?"

Daisy did not look at all absent-minded now. Pete gave her a neat little sheaf of bank notes.

"And from now on, darling," he said cheerfully, "whenever you want money just come in here, start the machine—and there you are! Isn't that nice?"

"I want some more money now," said Daisy. "I have to buy a trousseau."

"I hoped you'd feel that way!" said Pete enthusiastically. "Here goes! And we have a reunion while the pennies roll in."

The demonstrator began to cluck and clatter with bills instead of quarters on the plate. Once, to be sure, it suspended all operations and the refrigeration unit purred busily for a time. Then it resumed its self-satisfied delving into the immediate past.

"I haven't been making any definite plans," explained Pete, "until I talked to you. Just getting things in line. But I've looked after Arthur carefully. You know how he loves cigarettes. He eats them, and though it may be eccentric in a kangaroo, they seem to agree with him. I've used the demonstrator to lay up a huge supply of cigarettes for him—his favorite brand, too. And I've been trying to build up a bank account.

I thought it would seem strange if we bought a house on Park Avenue and just casually offered a trunkful of bank notes in payment. It might look as if we'd been running a snatch racket."

"Stupid!" said Daisy.

"What?"

"You could be pyramiding those bills like you did the quarters," said Daisy. "Then there'd be lots more of them!"

"Darling," said Pete fondly, "does it matter how much you have when I have so much?"

"Yes," said Daisy. "You might get angry with me."

"Never!" protested Pete. Then he added reminiscently. "Before we thought of the bank note idea, Thomas and I filled up the coal bin with quarters and half dollars. They're still there."

"Gold pieces would be nice," suggested Daisy, thinking hard, "if you could get hold of some. Maybe we could."

"Ah!" said Pete. "But Thomas had a gold filling in one tooth. We took it out and ran it up to half a pound or so. Then we melted that into a little brick and put it on the demonstrator. Darling, you'd really be surprised if you looked in the woodshed."

"And there's jewelry," said Daisy. "It would be faster still!"

"If you feel in the mood for jewelry," said Pete tenderly, "just look in the vegetable bin. We'd about run out of storage space when the idea occurred to us."

"I think," said Daisy enthusiastically, "we'd better get married right away. Don't you?"

"Sure! Let's go and do it now! I'll get the car around!"

"Do, darling," said Daisy. "I'll watch the demonstrator."

BEAMING, Pete kissed her ecstatically and rushed from the laboratory. He rang for Thomas, and rang again.

It was not until the third ring that Thomas appeared. And Thomas was very pale. He said agitatedly:

"Beg pardon, sir, but shall I pack your bag?"

"I'm going to be—— Pack my bag? What for?"

"We're going to be arrested, sir," said Thomas. He gulped. "I thought you might want it, sir. An acquaintance in the village, sir, believes we are among the lower-numbered public enemies, sir, and respects us accordingly. He telephoned me the news."

"Thomas, have you been drinking?"

"No, sir," said Thomas pallidly. "Not yet, sir. But it is a splendid suggestion, thank you, sir." Then he said desperately: "It's the money, sir—the bank notes. If you recall, we never changed but one lot of silver into notes, sir. We got a one, a five, a ten and so on, sir."

"Of course," said Pete. "That was all we needed. Why not?"

"It's the serial number, sir! All the one-dollar bills the demonstrator turned out have the same serial number—and all the fives and tens and the rest, sir. Some person with a hobby for looking for kidnap bills, sir, found he had several with the same number. The secret service has traced them back. They're coming for us, sir. The penalty for counterfeiting is twenty years, sir. My—my friend in the village asked if we intended to shoot it out with them, sir, because if so he'd like to watch."

Thomas wrung his hands. Pete stared at him.

"Come to think of it," he said meditatively, "they are counterfeits. It hadn't occurred to me before. We'll have to plead guilty, Thomas. And perhaps Daisy won't want to marry me if I'm going to prison. I'll go tell her the news."

Then he started. He heard Daisy's voice, speaking very angrily. An instant

later the sound grew louder. It became a continuous, shrill, soprano babble. It grew louder yet. Pete ran.

He burst into the laboratory and was stunned. The demonstrator was still running. Daisy had seen Pete piling up the bills as they were turned out, pyramiding to make the next pile larger. She had evidently essayed the same feat. But the pile was a bit unwieldy, now, and Daisy had climbed on the glass plate. She had come into the scope of the demonstrator's action.

There were three of her in the laboratory when Pete first entered. As he froze in horror, the three became four. The demonstrator clucked and hummed what was almost a hoot of triumph. Then it produced a fifth Daisy. Pete dashed frantically forward and turned off the switch just too late to prevent the appearance of a sixth copy of Miss Daisy Manners of the Green Paradise floor show. She made a splendid sister act, but Pete gazed in paralyzed horror at this plethora of his heart's desire.

Because all of Daisy was identical, with not only the same exterior and—so to speak—the same serial number, but with the same opinions and convictions. And all six of Daisy were convinced that they, individually, owned the heap of bank notes now on the glass plate. All six of her were trying to get it. And Daisy was quarreling furiously with herself. She was telling herself what she thought of herself, in fact, and on the whole her opinion was not flattering.

ARTHUR, like Daisy, possessed a fortunate disposition. He was not one of those kangaroos who go around looking for things to be upset about. He browsed peacefully upon the lawn, eating up the dahlias and now and again hopping over the six-foot hedge in hopes that there might be a dog come along the lane to bark at him. Or, failing to see a dog, that somebody might have

come by who would drop a cigarette butt that he might salvage.

At his first coming to this place, both pleasing events had been frequent. The average unwarned passer-by, on seeing a five-foot kangaroo soaring toward him in this part of the world, did have a tendency to throw down everything and run. Sometimes, among the things he threw down was a cigarette.

There had been a good supply of dogs, too, but they didn't seem to care to play with Arthur any more. Arthur's idea of playfulness with a strange dog—especially one that barked at him—was to grab him with both front paws and then kick the living daylights out of him.

Arthur browsed, and was somewhat bored. Because of his boredom he was likely to take a hand in almost anything that turned up. There was a riot going on in the laboratory, but Arthur did not care for family quarrels. He was interested, however, in the government officers when they arrived. There were two of them and they came in a roadster. They stopped at the gate and marched truculently up to the front door.

Arthur came hopping around from the back just as they knocked thunderously. He'd been back there digging up a few incipient cabbages of Thomas' planting, to see why they didn't grow faster. He soared at last an easy thirty feet, and propped himself on his tail to look interestedly at the visitors.

"M-my heavens!" said the short, squat officer. He had been smoking a cigarette. He threw it down and grabbed his gun.

That was his mistake. Arthur liked cigarettes. This one was a mere fifteen feet from him. He soared toward it.

The government man squawked, seeing Arthur in mid-air and heading straight for him. Arthur looked rather alarming, just then. The officer fired recklessly, missing Arthur. And Arthur remained calm. To him, the shots were not threats. They were merely the

noises made by an automobile whose carburetor needed adjustment. He landed blandly, almost on the officer's toes—and the officer attacked him hysterically with fist and clubbed gun.

Arthur was an amiable kangaroo, but he resented the attack, actively.

The short, squat officer squawked again as Arthur grabbed him with his forepaws. His companion backed against the door, prepared to sell his life dearly. But then—and the two things happened at once—while Arthur proceeded to kick the living daylights out of the short, squat officer, Thomas resignedly opened the door behind the other and he fell backward suddenly and knocked himself cold against the doorstep.

Some fifteen minutes later the short, squat officer said gloomily: "It was a bum steer. Thanks for pulling that critter off me, and Casey's much obliged for the drinks. But we're hunting a bunch of counterfeiters that have been turning out damn good phony bills. The line led straight to you. But if it had been you, you'd have shot us. You didn't. So we got to do the work all over."

"I'm afraid," admitted Pete, "the trail would lead right back. Perhaps, as government officials, you can do something about the fourth-dimensional demonstrator. That's the guilty party. I'll show you."

HE led the way to the laboratory. Arthur appeared, looking vengeful. The two officers looked apprehensive.

"Better give him a cigarette," said Arthur. "He eats them. Then he'll be your friend for life."

"Hell, no!" said the short, squat man. "You keep between him and me! Maybe Casey'll want to get friendly."

"No cigarettes," said Casey apprehensively. "Would a cigar do?"

"Rather heavy, for so early in the

morning," considered Pete, "but you might try."

Arthur soared. He landed within two feet of Casey. Casey thrust a cigar at him. Arthur sniffed at it and accepted it. He put one end in his mouth and bit off the tip.

"There!" said Pete cheerfully. "He likes it. Come on!"

They moved on to the laboratory. They entered—and tumult engulfed them. The demonstrator was running and Thomas—pale and despairing—supervised its action. The demonstrator was turning out currency by what was, approximately, wheelbarrow loads. As each load materialized from the fourth dimension, Thomas gathered it up and handed it to Daisy, who in theory was standing in line to receive it in equitable division. But Daisy was having a furious quarrel among herself, because some one or other of her had tried to cheat.

"These," said Pete calmly, "are my fiancée."

But the short, squat man saw loads of greenbacks appearing from nowhere. He drew out a short, squat revolver.

"You got a press turning out the stuff behind that wall, huh?" he said shrewdly. "I'll take a look!"

He thrust forward masterfully. He pushed Thomas aside and mounted the inch-thick glass plate. Pete reached, horrified, for the switch. But it was too late. The glass plate revolved one-eighth of a revolution. The demonstrator hummed gleefully; and the officer appeared in duplicate just as Pete's nerveless fingers cut off everything.

Both of the officers looked at each other in flat, incredulous stupefaction. Casey stared, and the hair rose from his head. Then Arthur put a front paw tentatively upon Casey's shoulder. Arthur had liked the cigar. The door to the laboratory had been left open. He had come in to ask for another cigar.

But Casey was hopelessly unnerved. He yelled and fled, imagining Arthur in hot pursuit. He crashed into the model of a tesseract and entangled himself hopelessly.

Arthur was an amiable kangaroo, but he was sensitive. Casey's squeal of horror upset him. He leaped blindly, knocking Pete over on the switch and turning it on, and landing between the two stupefied copies of the other officer. They, sharing memories of Arthur, moved in panic just before the glass plate turned.

Arthur bounced down again at the demonstrator's hoot. The nearest copy of the short, squat man made a long, graceful leap and went flying out of the door. Pete struggled with the other, who waved his gun and demanded explanations, growing hoarse from his earnestness.

Pete attempted to explain in terms of pretty girls stepping on banana peels, but it struck the officer as irrelevant. He shouted hoarsely while another Arthur hopped down from the glass plate—while a third, and fourth, and fifth, and sixth, and seventh Arthur appeared on the scene.

He barked at Pete until screams from practically all of Daisy made him turn to see the laboratory overflowing with five-foot Arthurs; all very pleasantly astonished and anxious to make friends with himself so he could play.

ARTHUR was the only person who really approved the course events had taken. He had existed largely in his own society. But now his own company was numerous. From a solitary kangaroo, in fact, Arthur had become a good-sized herd. And in his happy excitement over the fact, Arthur forgot all decorum and began to play an hysterical form of disorganized leapfrog all about the laboratory.

The officer went down and became a

take-off spot for the game. Daisy shrieked furiously. And Arthur—all of him—chose new points of vantage for his leaps until one of him chose the driving motor of the demonstrator. That industrious mechanism emitted bright sparks and bit him. And Arthur soared in terror through the window, followed by all the rest of himself, who still thought it part of the game.

In seconds, the laboratory was empty of Arthurs. But the demonstrator was making weird, pained noises. Casey remained entangled in the bars of the tesseract, through which he gazed with much the expression of an inmate of a padded cell. Only one of the short, squat officers remained in the building. He had no breath left. And Daisy was too angry to make a sound—all six of her. Pete alone was sanely calm.

"Well," he said philosophically, "things seem to have settled down a bit. But something's happened to the demonstrator."

"I'm sorry, sir," said Thomas pallidly, "I'm no hand at machinery."

One of Daisy said angrily to another of Daisy: "You've got a nerve! That money on the plate is mine!"

Both advanced. Three more, protesting indignantly, joined in the rush. The sixth—and it seemed to Pete that she must have been the original Daisy—hastily began to sneak what she could from the several piles accumulated by the others.

Meanwhile, the demonstrator made queer noises. And Pete despairingly investigated. He found where Arthur's leap had disarranged a handle which evidently controlled the motor speed of the demonstrator. At random, he pushed the handle. The demonstrator clucked relievedly. Then Pete realized in sick terror that five of Daisy were on the glass plate. He tried to turn it off—but it was too late.

He closed his eyes, struggling to retain calmness, but admitting despair.

He had been extremely fond of one Daisy. But six Daisies had been too much. Now, looking forward to eleven and——

A harsh voice grated in his ear.

"Huh! That's where you keep the press and the queer, huh—and trick mirrors so I see double? I'm going through that trapdoor where those girls went! And if there's any funny business on the other side, somebody gets hurt!"

The extra officer stepped up on the glass plate, inexplicably empty now. The demonstrator clucked. It hummed. The plate moved—backward! The officer vanished—at once, utterly. As he had come out of the past, he returned to it, intrepidly and equally by accident. Because one of Arthur had kicked the drive lever into neutral, and Pete had inadvertently shoved it into reverse. He saw the officer vanish and he knew where the supernumerary Daisies had gone—also where all embarrassing bank notes would go. He sighed in relief.

But Casey—untangled from the tesseract—was not relieved. He tore loose from Thomas' helpful fingers and fled to the car. There he found his companion, staring at nineteen Arthurs playing leapfrog over the garage. After explanations they would be more upset still. Pete saw the roadster drive away, wabbling.

"I don't think they'll come back, sir," said Thomas hopefully.

"Neither do I," said Pete in a fine, high calm. He turned to the remaining Daisy, scared but still acquisitive. "Darling," he said tenderly, "all those bank notes are counterfeit, as it develops. We'll have to put them all back and struggle along with the contents of the woodshed and the vegetable bin."

Daisy tried to look absent-minded, and failed.

"I think you've got nerve!" said Daisy indignantly.

The tale of an

Avalanche

by Dow Elstar

"Our work shall reach the farthest star, master, to where space curves back, upon itself!"



THEY COME, master. It is the end."

Fai Torran glanced up from his work bench and grinned at his Negro servitor who stood with his huge body flattened defensively against the door of the laboratory.

"The end and the beginning, Nareth," Fai Torran remarked with a lack of excitement born of perfect self-assurance. "We are ready. They think that they have conquered; but all that we must do has been done, except for the final gesture. I believe that it would

be amusing to let our friends, the Rothel, watch that final gesture. Am I right?"

Nareth's teeth flashed appreciatively. The glistening muscles of his nude torso relaxed a trifle. "There can be no harm in it, master," he said. "If we are careful."

Fai Torran removed a complicated helmet from his head, and tossed it carelessly into a corner of the apparatus-packed room. For a moment he listened. He heard the beat of mechanical wings and the sullen *whoosh* of bombs. The nostrils of his slender nose twitched disdainfully.

His gaze wandered to a pair of six-inch globes that rested in fragile cradles against one wall. The aspect of those globes was not impressive. They were of bright metal, and about them clung faint, rosy auræ. In addition to what might have been some sort of optical devices resembling bejewelled bosses, each was equipped with several curiously complex arms, folded now into grooves, so as to conform perfectly to the spherical contours of the mechanisms to which they belonged.

No, those globes did not look impressive; yet in their delicate intricacies, by an alchemy unequaled in the previous achievements of mankind; the genius of Fai Torran and Nareth, the greatest wizards of the period, had been recreated.

Fai Torran's blue eyes twinkled like bright bits of steel. "Let it be so, Nareth," he said. "Let our conquerors see."

The Negro's fingers spun a burnished dial. Immediately the enameled whiteness of the walls dimmed. Atoms were rearranged. The laboratory building became as transparent as air. Beyond its barriers the city sprang into view, a bedlam of lust and destruction under the stars.

Slim shapes, swift and cruel, darted

overhead. Buildings, reared to endure until a planet died, crashed thunderously into dark streets. Flames flared, and people scurried like frightened ants before gusts of vapor that rolled toward them and over them, choking their cries of terror and stilling their futile efforts to escape death.

In three minutes the grim job was finished. It was almost quiet once more. The lab, its stout armor impervious to both gas and bombs, remained unscathed. But it could be reduced in other ways.

Out of the throbbing shadows cast by the blazing hulks of a culture that had perished, the victors appeared, moving with methodical precision across the wreckage that was their handiwork.

Beyond the outer barrier of the laboratory they halted. There were thousands of them in sight. They were a tall people, and massive; not one could have measured less than seven feet in height. They were clad in thick, rubberized clothing to protect them from the poison they had scattered; and each wore a transparent helmet over his head. Both men and women were represented in about equal numbers. Their faces were leathery and brown, their noses aquiline, their eyes were intelligent and cruel. In their hands strange weapons glittered. They were the Rothel.

A careful practice of eugenics through the centuries had given the Rothel the strength and size and tenacity which had made them supreme. Unchecked, they had swept across Europe, Asia, North and South America—the entire world. This city had been the last to fall.

NOW they stood before the workshop of the men whose wizardry had hurled so many ghastly death traps in their path to conquest. For Fai Torran, the little Caucasian, and for Nareth, the giant Ethiop, they still felt a grudging respect and awe, even though these

two hated enemies seemed now within reach.

The Rothel exchanged muffled mutterings through the respirators of their helmets. They had not yet offered to attack the walls of the laboratory, invisible, but palpable and solid to the touch. Perhaps they feared some new and ghoulish trick.

Fai Torran and Nareth studied their gaunt, weathered faces, on which the ruddy light of the burning city danced and played.

Finally the Caucasian spoke, and an amplifier system conveyed his words to the horde without.

"I congratulate you, people of Rothel," he said. "At present you represent the pinnacle of organized ruthlessness upon this planet. It is splendid."

Fai Torran's tone was curiously sincere. There was an element of mockery in it too, but it was subdued. He meant what he said almost literally.

The grumblings of the Rothel became more tense and nervous.

"It is perhaps unfortunate that the universe is not static," Fai Torran continued. "Changes take place. Progress is constantly going on. It is perhaps also unfortunate that might so often makes right.

"Man, or flesh in any form, intelligent or otherwise, is not the ultimate goal of creation. Such things are only tools—clumsy tools to be employed in the production of something better. There is at least one more step before the final boundary of progress is attained."

Fai Torran's slender hand pointed toward the two small spheres that squatted motionless in their cradles. His habitual confidence seemed more marked than ever. His calm was that of a seer who has glimpsed the future, and who knows absolutely what is soon to take place.

"Within a very few minutes Nareth and I shall cease to exist as men," he

said. "However, our minds of flesh have been duplicated in metal, and hence shall not be really destroyed. One of those globes contains a perfect mechanical copy of my brain; the other contains a duplicate of Nareth's brain. They are more compact than the living originals themselves. The memory of each of us is there, the thought mechanism, the will, the consciousness, the capacity to feel emotion, even. These may seem strange assertions; but when one remembers that the human brain is largely an intricate machine functioning under the action of stimuli suited to it, just as do many other mechanisms, the facts become clear.

"One of the purposes of a brain is to associate ideas, another is to retain knowledge. Even the crude calculating machines used by our ancestors of long ago, accomplished the first of these in a simple way; they could associate several numbers with their sum or product. And even a book may be said to possess memory.

"But enough of this. Watch!"

Fai Torran approached the globes. With a finger he jabbed two studs that projected from a tiny switchboard on the supporting framework. The rosy glow that surrounded the spheres brightened. They lifted lightly from their cradles, and began to circle the chamber like a pair of birds seeking a means of egress.

Nareth, the Negro-slave scientist, pushed another stud on the wall. In response there came a rattling, grating noise from overhead. It was the sound of metal sliding over metal. Nothing could be seen, but the watchers knew that a trapdoor had opened in the invisible roof.

Unerringly the twin globes hurtled toward the opening, and through it. In their wake the trap clanged shut. The time between the beginning and end of the operation had been but a moment. Had it been longer, the deadly gas that

covered the metropolis would have entered in sufficient quantity to have killed the two savants.

With quickening velocity the spheres shot toward zenith, the light they emitted shading toward orange as their speed became meteoric, and friction with the tenuous upper atmosphere heated their shells almost to incandescence. Then they vanished among the stars.

The Rothel stared in wonder at the phenomenon, their fingers tightening on the burnished weapons they carried. Many of them must have expected sudden death, yet they did not cringe; fear had been bred out of them centuries ago.

"Do not be too concerned," Fai Torran advised. "Those devices, which you have just seen leaving the Earth, shall not return for three years. There is no immediate danger from the globes. Nor was their departure a very inspiring spectacle. They weigh less than two kilograms a piece."

The Caucasian's lips curved with saturnine humor.

A rising growl came from the multitude of Rothel, presaging an attack. They felt relieved, and they were impatient to finish their grim task.

FAI TORRAN held up his hand. "Wait!" he commanded. "There is more to tell. By all the signs the next three years shall be peaceful and prosperous to you. But there is one thing for you to remember through this period of prosperity: The very ancient story of the farmer who, thinking he had made a great bargain, contracted to pay a man he had hired one grain of wheat on the first day he worked, two grains on the second day, four grains on the third day, eight grains on the fourth, and so on. Needless to remark, the farmer was soon dispossessed of all he owned, and was heavily in debt. Perhaps what I speak of seems a meaningless jargon, but its significance shall be-

come clear in three years. Doubtless many of you shall live to witness the events to which I refer."

The Caucasian savant paused. Secure in his knowledge of coming events, he surveyed the multitude with a calm that bordered on indifference. Nareth, proud and grim as some genie of a forgotten lore, stood near by, arms folded across his breast.

Delay galled the Rothel, masters now of an entire planet. Thin streams of incandescence flashed from their weapons, and with spattering bursts of flame, bit into the hidden barriers of the laboratory.

The little Caucasian moved a switch. "That is all I have to say," he stated casually; but his voice, amplified a thousandfold, still thundered dominantly above the roar of the multitude. "That is all I have to say except this: In a minute my workshop, and much that is in its vicinity, shall be torn apart by an atomic explosion. Those of you who can had best depart at once."

Thus Fai Torran and Nareth ceased to exist as men. And though the disciplined Rothel host retreated with calm efficiency, fully half their number perished in the blast. Emphasized thus, it was a night not easy to forget.

However, the Rothel did forget, as far as they were able. Perhaps it is in the nature of every strong people to discredit promises of danger which they do not understand, and against which they have no defense. In the background of Rothel thoughts, tweaking uncertainties still lingered, to be dismissed with a shrug.

Peace came, for there were no other nations left with which to war. There was time now to plan and to build and to dream. Cities arose, commerce thrived, luxury was reborn. Scientists returned their attentions to such impractical subjects as the stars.

It had been long since the Rothel had last built an astronomer's telescope. It

had been ages since, in the ups and downs of their unpredictable career, humans had last launched a full-size space ship into the void. The nation to which Fai Torran and Nareth had belonged had possessed the necessary knowledge, but that nation had been exterminated. In the normal course of events it might require half a millennium to regain what had been lost.

However, urged on by the eternal fascination of a mystery, the Rothel went to work with their new telescopes. During the first and second year they found the solar system almost unchanged from its ancient self, as mapped and described in the few musty records that archæologists were able to unearth. Jupiter had a new moon, and its great red spot was missing. There had been minute shiftings in the orbits of several planets—nothing more. The stars across the interstellar vastness had moved a trifle, in some cases forming new constellations; but that was to be expected.

Then came the first warnings. On the asteroid, Ceres, reddish spots, like masses of hot gas, appeared. The spots spread swiftly; beneath them gigantic chasms became visible. The tiny planet took on a pitted, diseased aspect. Like a fruit from which large chunks have been gouged, Ceres began to shrink. A murky atmosphere surrounded it now, where there had been no atmosphere at all before. Just what was taking place the Rothel had no means of discovering, even though their telescopes were considerably better than those used in the remote twentieth century.

Meanwhile, in swift succession, the numerous other asteroids were similarly affected, as though a plague were devouring them—a plague whose spread mounted with incredible momentum. The planet Mars fell prey to it, then the moons of Jupiter, huge Jupiter itself, Saturn and its satellites, Venus, Mercury, Uranus, Neptune and Pluto!

AST-8

For some reason—which the Rothel were inclined to associate with Fai Torran and his slave, Nareth—the Earth still remained untouched. But the savants of the Rothel knew that the disease would soon strike their home world.

That it would be fatal was evident. Spectroscopic observations told that the murk around the diseased planets were composed of highly poisonous radioactive gases, produced as a by-product of the transmutation of elements and atomic disintegration. Deadly in the minutest quantities, it could not be filtered out of the air effectively. And there was every reason to suppose that other fatal circumstances would arise.

Through space, nebulous, rose-tinted clouds shifted, traveling from world to world.

NOT EVEN the Sun itself was immune to the pestilence. Perceptibly its radiations waned, as if shields of opaque vapor had been thrown over its incandescent photosphere to protect from the heat whatever was absorbing its substance.

The Earth and the Moon were the last to be attacked. The Rothel saw then what the catastrophe was; they understood Fai Torran's prophecy.

It began like a deluge of meteors flaming against the stars on the night hemisphere of the planet, for from that direction came the onslaught. There were sounds of solid objects rushing through air, and the quaking thuds of their landing.

Things of metal, cast in myriad forms, equipped with minds with which to think, and tools with which to put their thoughts and impulses into action. Some had propulsive mechanisms of their own, with which they had flown through space; others had been carried to Earth on vast flying platforms. And their numbers were already inconceivable.

They had but one urge now. That

was to reproduce their kind, to expand, to multiply. They needed materials with which to gratify this lust; the Earth was here, ready to supply these materials.

Quickly they went to work, setting up their equipment. Gigantic excavators scooped the soil of the planet into transmutation furnaces. Any substance would serve their purpose; for the electrons and protons of its atomic structure could be rearranged to form any of the numerous elements they needed, in the necessary amounts.

The Rothel saw the holocaust begin. They watched, as in a matter of hours, vast gaps appeared in the crust of the planet they had thought was their own. They saw clouds of red-hot vapor rise skyward, polluting the atmosphere. They heard the roar and the throb and the hiss of machines, hurtling over their heads in an endless stream.

And since it was in their nature, the Rothel fought to stem the tide. They destroyed perhaps a hundred millions of the invaders, but it was nothing. The numbers of the metal things around them, doubled and redoubled with ever-increasing speed as the ranks of the workers grew. The machines seemed almost indifferent to the presence of the Rothel; and except to defend themselves, they made no direct effort to destroy their human enemies.

Hot winds, polluted with poison, raged over the planet; still the cataclysmic toil of the conquerors went on unchecked. The crust of the world was already gouged away in spots, exposing the molten core in ragged, ulcerous patches.

Those few Rothel who had managed to evade the poison and still lived, muttered that this was the vengeance of Fai Torran and Nareth.

But out of the hell around them, metallic voices spoke in denial:

"Not revenge; progress. We are stronger than men; we have fewer limi-

tations. We are nearer the ultimate goal. Not revenge; progress."

So, amid thunder and earthquake, mankind perished. The forces which had terminated their dominance, continued to expand. Earth was stripped of its shell; but the machines, working now on immense raftlike constructions which floated on the molten interior, went on with their task which could terminate only when all available materials had been exhausted.

ONE BY ONE the various bodies of the solar system ceased to exist. The asteroids were first, then Mars, then the satellites of Jupiter. They dissolved like garments eaten by moths, and the hordes which had been created out of their substance proceeded to the nearest source of more material. Scarcely a meteor within the orbit of Pluto was missed in the methodical quest for supplies.

The Sun resisted the onslaught longest. Its huge bulk, heated at its core to a temperature measured in millions of degrees, offered obstacles that were awesome even to minds of metal. Yet the obstacles were surmounted; the shields of opaque vapor were thickened over the photosphere. The destroying radiations were subdued, and the white-hot gases of the Sun were drawn by reversed gravity into the workshops of the invaders, suspended in space. There they were cooled, transmuted, and wrought into shape.

Finally nothing remained of the solar system but a phosphorescent mist, tenuous as the vapors of a comet's tail. An end had been reached. Except for this residual trace, all matter in this part of the universe had been used to build the metal horde.

It had grown now until its weight equaled the mass of a minor sun and its retinue. Split into many parts, it dispersed, hurtling at tremendous velocity toward fresh sources of expansion.

Everywhere in the spherical firmament, stars gleamed.

One detachment moved toward red Antares. Lost in the incalculable host were two tiny spheres, battered and worn now, but active as any of the varied forms around them.

They had parented this colossal transformation. On the asteroid, Ceres, toiling alone, plying simple tools with the tactile arms with which they were equipped, they had mined materials and had fabricated the first of their companion machines, who, in turn, had helped them to build others. For three years they had been rulers of the metal host. But now as they had anticipated, it had grown too huge to be controlled.

They coursed along side by side, and by means of delicate etheric impulses, they conversed:

"We should be glad, master," one said. "It is a time of great triumph."

"I did not expect to be glad, Nareth," the other responded. "But perhaps I am. I do not know."

"Our work shall expand until it reaches the farthest star, the remotest galaxy, master—until it touches the ultimate limit where space curves back upon itself!" said the mechanical duplicate of the dead Nareth.

"Perhaps," replied Fai Torran's double. "We shall see."

"It is inevitable, master! What else do you expect?" Nareth demanded.

Fai Torran considered for a long moment. Many things passed through the

channels of his mind. Was this that he and Nareth had done the final milestone of progress? He thought of the theories he had once entertained; of the disembodied intellects he had envisioned, detached from both flesh and metal; of interdimensional forces beyond imagining; of life, of love, of death; of strange, unfathomable yearnings. And he, who had always been so self-assured, felt small and lost and inadequate. After all, this achievement which he had done so much to bring about was a tiny thing compared to the endless wonders of the universe. The stars, burning with such steady calm, seemed deifically wise and inscrutable, promising the unknown. Obstacles, conflicts, destruction, fear, tolerance, mercy, the pattern of the universe—what did they all mean? What did anything mean? Or was his mind too small to grasp the meaning? Within him he thought he glimpsed a shadow, dim and grand; but he was not sure.

Fai Torran was bewildered. He did not know whether to rejoice because of his part in the creation of this ruthless metal horde, or to feel remorse. And the future? That he could no longer foresee. There were too many circumstances, too many causes, too many purposes, that were beyond his understanding.

"What do I expect, Nareth?" he questioned humbly. "I do not know."

They were borne on with the avalanche.





Forbidden Light

*A tale of
medieval science*

by James Montague

IN TRYING to escape the unexpected hurricane—an astonishing disturbance for the middle of July—Pierce Stanton had driven his heavy car deeper into the mountains instead of out of them upon leaving the trout stream where he had fished all day.

It was an unnatural storm that appeared to originate in the earth rather than the heavens. Lightning, in the strangest shapes he had ever seen, streaked upward like giant rockets that burst in the clouds in showers of light rays, to bring down rain in torrents.



The viselike grip tightened, began crushing him backward, cruelly, inexorably—

It resembled Fourth of July pyrotechnics more than anything else.

After about ten minutes of this singular agitation, during which Stanton continued to force his motor over increasingly rough road, the miniature storm seemed to be answered from above with a turbulence of the intensest fury. A veritable battle ensued. Great bolts, resembling the tongues of golden serpents, mingled with the rocketlike flashes, to bring about the devastating flares across a field of carnage.

"If this isn't a hell hole, I've never been caught in one!" Stanton exclaimed, as one of his headlights went out to make his progress more difficult.

A lover of the outdoors, he had sought peace and relaxation from his duties as a Boston scientist; in a week's fishing. Aimlessly, he had motored to isolated places seldom visited by tourists.

The day had been hot and cloudless until about seven o'clock when, from the clearest of skies, the unnatural phe-

phenomenon had struck without warning. Fairest day had turned to blackest night in the time it had taken him to dash from the stream to his car.

A white bolt, which blinded him temporarily by its brilliant nearness, brought a giant pine crashing across his path less than a hundred yards away—a dramatic warning, it seemed, that he had penetrated far enough into this unknown wilderness.

He yanked his emergency to its last notch, but this was hardly necessary for his big car jammed immovably between washed-out boulders and tree stumps. The lightning revealed that he was perched on top of a razor-back ridge of rutted ground that sloped on either side to the most ominous-looking waters imaginable.

As the storm threatened to grow more perilous, he sought refuge from annihilation. A small structure on a jag of the slope to the right could be discerned in a clump of white birches, and hopping from his car he made his way there with all speed possible. He took with him his duffel bag, fishing kit and rifle, intending to make a night of it.

A rotted flight of wooden steps ascended to the rear of the shack, the back door of which he forced with his shoulder. Inside he struck a match. It was an old camp, judging by its rough furnishings, and cobwebs everywhere. An old-fashioned lamp on a shelf contained some oil, and he lighted it, placing it on a bare table.

Wondering at the phenomenon of the storm, Stanton sat down and removed his waders.

Suddenly he sat bolt upright, his hands gripping the sides of the chair. The most horrible noise—the most hair-raising howl of pain, rage or exultation that had ever assailed human ears—out-blasted the hysteria of the hurricane. It came from outside, near at hand, and was accompanied by the crash of trees, as though some great body had

been hurled into the forest to crush everything in its way.

With a stride he was at the door, where he stopped short, shocked by what he saw, or thought he saw. Striding down the rocky ridge was something indescribable.

A ghostly thing, as ponderous as a rhinoceros walking on its hind legs—a thing that gleamed in the darkness with a pale, yellowish light, was his first impression. Then it was gone.

Cautiously, with eyes striving to pierce the gloom whence the fantastic shape had evaporated like a soft light gradually extinguished, he descended the wooden steps to the roadway. And there he made a discovery that added to his consternation.

His car was gone!

STANTON'S supposition was that a bolt of lightning had blasted the machine out of existence. No other force, with the exception of a wrecking crew, could have moved it. But a second later he had to revise this conjecture. The edge of the wooden slope to the left was but a few feet away. Down this slope a wide swath of flattened birches and young hemlocks marked the vehicle's descent. It rested—nose-on and right side up—against larger trees that had stopped its plunge into the lake, its single eye glowing like a beacon in the darkness.

The scientist slid down and made a hasty examination. The brakes were still set, and so far as he was able to determine no damage had been done except to the radiator.

He pondered the incomprehensible occurrence. There was only one plausible answer. The thing he had seen—the massive, yellowish apparition that glowed in the blackness like a mammoth fire bug—finding the car in the path, had tossed it out of its way!

Stanton crawled up the slope and flopped on his stomach. The thing was

returning. Up it came, walking like a man. He could obtain a better view of it now, and his amazement increased on closer inspection. It must weigh a ton! Its smooth, massive body, ponderous arms and legs, and small head, gave off a luminous glow. Hairless, its skin shimmered with a livid hue. There were no horns nor tail, but there should have been.

In a pair of tongs it carried a huge square of ice as though it were a match box. On it crunched, its great feet sounding like suction pumps in the muddy roadway. It passed within a few yards of the prostrate observer, and stepped over the lightning-struck pine with ease. Then, in a diminishing aura of yellowish light, it disappeared in the thick corridor of sentinel pines that guarded the knoll above.

Stanton raised himself to his knees, then got slowly to his feet. He had seen something incomprehensible, and yet he had to believe it. Whatever it was, it actually existed. It was no hallucination. There must be a cold, hard, scientific explanation. Starting to return to the camp, his foot went into a hole up to his calf, and he fell. Scrambling up, he dashed for the steps, gained the shack, and closed the door quietly behind him. He sat down, breathing heavily, to do some puzzled thinking.

Off at some distance was another camp similar to the one he was occupying. But there was no clue to the identity of the mysterious being. There was evidence everywhere, however, that this spot in the mountains had been left to itself for years. Which suggested that possibly the presence of the thing was known, and for that reason no one dared venture near its abode.

An overwhelming desire to learn more about the thing, to capture it if possible, was pounding at his reason. But his common sense held this ambition in check. The incident of the car

tossed over the slope was a hint too emphatic to ignore.

Sleeping on the premises with such a formidable engine of destruction wandering loose, was out of the question. To leave the enigma unsolved was equally unthinkable. He paced the two-roomed camp.

IN the front room, with the aid of the lamp, he found a badly executed oil painting of a refined, white-haired, old man, and over the fireplace stood another painting, that of a stiffly drawn Irish setter, pointing a quail. From the corners of these pictures spider webs reached the low ceiling.

A small front porch faced the lake, near the edge of which Stanton could dimly discern a water pump, and a flat boat.

He made these observations as he came to a conclusion. It was fair to assume that the thing he couldn't categorize had inhabited this remote, mountainous retreat for a considerable period of time, and that it was not likely to depart on short notice. His logical course, then, was to seek the nearest village. There he could make some judicious inquiries.

This decision reached, Stanton started down the trail on foot, casting an occasional backward glance to make sure he wasn't being followed. Somehow he could not escape the feeling that the unnaturalness of the sudden storm was in some way related to the enigmatical being. He would study this thing and see it through.

As he was about to turn into a wider lane an unusually severe crack of lightning, like a departing shot, caused him to glance skyward apprehensively. There, in the topmost branches of a tall, dead pine, he glimpsed the whitened skeleton of some long-departed animal. Its jaws were locked open in death as though it had sought savagely to defend itself with its expiring snarl.

This gruesome exhibit, as well as all the other bizarre details of the weird evening, hastened Stanton's stride.

II.

HALF A MILE farther, the scientist crossed a creaking bridge, to the left of which he heard water tumbling over a dam. Another mile brought him near an abandoned farm, its unkempt house testifying mutely to its desertion. And, finally, at a distance he estimated to be five miles from the locale of his uncanny encounter, he emerged upon a wider road that ran at right angles to the one that zigzagged into the mountains.

Directly opposite stood a weather-beaten structure across the front of which he could make out a sign that proclaimed it to be ABNER GOOSEY'S GENERAL STORE AND POST OFFICE. But the front door and all the windows were boarded up tightly. Scattered here and there in the hamlet were a dozen or more houses, all empty. Obviously it was a deserted village, its mute residences black ghosts of a livelier time.

This being so, Stanton's hope of telegraphing or telephoning friends for assistance, went glimmering. He stood in the middle of the roadway, with the rain pelting his tousled head, unable to shake off an uncomfortable sensation of loneliness. He was the only living soul in that desolate neighborhood, and he had no way of determining how far he would have to walk to reach a living settlement.

While pondering his plight his eyes detected a tiny gleam of light farther up the roadway. He had to stare intently through the rain to be sure. Then he walked rapidly toward the beam, and saw that it came from a building that had once served as the village garage or repair shop. But like the other structures, it was boarded up securely. How-

ever, to the rear, stood an ancient car, in fresh wheel tracks, and he knew he was not alone in the community.

In fact, by placing his ear close to the knot hole through which the light came, he could distinctly hear some one inside. What could any one be doing in a boarded-up garage in a deserted village? He knelt in the wet grass and applied his eye to the tiny opening. As he did so, however, the light within was extinguished, and all he could see was some small object that glowed like a star in the black interior.

Apparently the object was on an anvil, for there followed the sound of resounding blows of a sledge. Then the mysterious workman switched on a flashlight, and with the aid of a pair of calipers appeared to be measuring the glowing object's dimensions.

Stanton sneezed in spite of himself, and after a short pause the sliding door of the shop was cautiously opened, and a man appeared. He held a flashlight in one hand and an old-fashioned revolver in the other. The scientist arose and walked toward him.

The workman was young, about Stanton's own age, and was dressed in worn overalls. His forearms were corded with muscles. "Who are you, and what are you doing here?" he demanded sharply.

"I've been fishing," Stanton replied cordially. "My car broke down, and I was looking for a place to sleep."

The native eyed him carefully; noted that his clothing substantiated Pierce's statement. "Where were you fishing?" he asked.

"Back in the mountains, at the end of that dirt road there," the scientist explained.

"Not on Lonesome Lake!" The farmer stepped forward and searched Stanton's face with doubting eyes.

"It was the loneliest spot I've ever been lost in," Pierce laughed. "How about stepping inside out of the rain?"

"Come on in." The other lighted a lamp that hung from a rafter, and as he did so, Stanton scanned the interior, but the bright object on the anvil had disappeared.

"So you were fishing at Lonesome and came out alive," his host added as his eyes again searched the visitor's face.

Stanton's expression remained unchanged. Obviously, this young farmer knew something of the enigma. "Why do you say that?" he asked casually, offering a cigarette, and lighting one himself.

BEFORE an answer was forthcoming the scientist's glance was attracted by a small circular tacked on the wall. Its edges were curled into dust collectors, and its small printing was indiscernible in the dim light, with the exception of the bold-faced caption: \$1,000 REWARD. Underneath was a photograph that Pierce at first judged to be a likeness of one of those "believe-it-or-not" exhibits usually discovered in small communities.

"What in the world is that?" he demanded.

"That," said his rural host quietly, "is the way they found old man Starrow's body—tied up like the four ends of a sheet holding the week's wash."

Stanton studied the leaflet more closely as a chill shot along his spine. At one time the gruesome mass had been a man's body, but, when photographed, the torso and limbs were so distorted and intertwined as to make it difficult to determine exactly what it had been originally.

"Mean to say you never heard of it, stranger?"

"I never did. This is my first visit to these parts."

"Thought the whole world knew about the Starrow mystery."

"Oh, it was a mystery, was it?"

"Still is. Sit down. If you was to

find a body tangled up like a Chinese puzzle, with nothing to show how it was done, or when it was done, or where it was done, you'd be mystified, too, wouldn't you?"

"I sure would," Stanton said.

"Well, that's the shape they found Starrow's remains in two years ago, and there ain't been any one along since to claim the reward. Detectives of two States worked on it, but gave it up as a bad job. The body was found smack on the boundary line, seventy-five miles north of here, and although each State claimed the crime was done in tother, they tried to solve it between 'em. That picture's all that's left of the affair now." He hesitated. "That is, that picture and the fear of the camps."

"What camps?"

"If you were fishing at Lonesome you must have seen the camps. There's three of 'em. Lonesome, that sets on backwater near the ice house; Lonesomer, that's farther up the slope to the right; and Lonesomest, the one that's hidden in the pines on top of the ridge."

"It was so dark up there I couldn't see much of anything," Stanton said evasively. "I had to leave my car."

"If your car's in there you'll never get it out," declared the other man with emphasis. "By the way, my name's Gideon. What's yours?"

The scientist told him. "Tell me more about Starrow's death," he added.

"There ain't much more to tell. The old man built the camps twenty years ago. The place used to be called Forgotten River, but he damned the north end, and made it into a big lake. He used to rent the camps to fishermen in times past. Some years ago he went in there to live permanent—him and his dog, Watcher. Sort of artistic, he was. Painted pictures of himself and the dog. Sometimes no one would see either of 'em for months. It was only this spring

that I found out what become of Watcher."

"What did become of him?"

"His skeleton's in the top of a dead pine that was struck by lightning last winter."

Stanton puffed at his cigarette. "Any idea how he got there, Gideon?"

The farmer flicked the butt of his cigarette into the grate. "Well, yes, I have," he said slowly. "But you wouldn't believe me if I was to tell you, Stanton."

"I'm ready to believe anything," the scientist returned.

THE OTHER lowered his voice slightly. "The monster that's lived in the camps since Starrow was killed, must have thrown the dog into the tree."

"The monster?" Stanton repeated incredulously.

"The monster, or whatever it is, got a hold of Starrow and tied him in knots, like that." He pointed to the circular. "And I'm wondering how you escaped. That's what I mean when I said you'd never get your car out. You couldn't get no one to go near them camps for a million dollars. At least no one that knows anything about 'em."

"But you discovered the dog's skeleton."

"Not intentionally, I didn't. I was trout fishing, and didn't know how close I was. I beat it out of there damn fast."

Stanton lighted a fresh cigarette, and regarded Gideon with an amused expression. "Has any one seen this thing you call a monster?" he asked.

The farmer nodded. "Abner Goosey did. Abner and his wife used to run the general store and post office here. A year or so ago Abner got the idea some one was running a still at the camps. Thought Starrow rented Lonesomest for that purpose. We'd seen lots of smoke in that direction, and sev-

eral times at night we'd heard a plane circling the lake. So Abner ginned up one night and crossed the dam in his hip boots. He got to tother side, and started climbing the slope, when something rose right up in front of him, yelling like Satan himself. Abner was so dog-gasted scared he tried to recross the dam on the run, but fell over and broke three ribs and his jawbone. He couldn't talk for months, but when he could he told me about it."

"And you believed him?"

"Sure I believed him, because it fit in with the tracks I'd found. He said the monster was eight feet tall, and almost as wide, and carried a battle-ax in one hand."

"What tracks do you refer to, Gideon?"

"Tracks eighteen inches long and twelve inches wide, by actual measurement. And that ain't the half of it, Stanton."

"Is that why this place is deserted?"

"Yes. The story got around, and although the people said it wasn't so, and claimed Abner was drunk, they all decided they'd rather bring up their children some other place. Abner and his wife were the last to pull out."

"Except you."

"I don't live here any more. I just come up once in a while. I got a hankering for that reward. A thousand dollars is a heap of money."

"Any hope of winning the reward?"

"Well, I'm sure I know how Starrow was killed, but I'm just as positive that no one will ever be able to capture the killer."

"Why?"

"I've come to the conclusion," the farmer replied with emphasis, "that the monster in the camps is the Devil himself, and you ain't never heard of any one capturing the Devil, have you?"

Stanton laughed. "No, I never have," he admitted.

"You can laugh," the farmer said,

"but you ain't got any idea how serious it is. I told you a moment ago you didn't know the half of it. I'll show you what I mean."

From a drawer he lifted a tin box, and from the box he took out an object about six inches square. At first glance it appeared to be a piece of vulcanized rubber. But as he received it, Stanton started. It was as cold as ice. "What is it?" he asked in wonderment.

"Flesh of the Devil," Gideon answered calmly.

"It's as pliable as kid," said the scientist, bending it.

"Never seen kid an inch thick, did you? And I don't know of any animal with hide that thick."

"Frigid-zone animals, possibly."

"Frigid-zone animals don't live in these parts, Stanton. And even if it was, why would it be as cold as ice?"

"Where did you get this thing, Gideon?"

"Found it by the trout stream, over by the Cobb farm. At first I thought it was some phosphorous substance."

"Why?"

"Because it shines in the dark. I'll show you." He turned out the lamp, and placed the object on the anvil. In the darkness it glowed like a star.

"When I heard you sneeze outside," Gideon said, "I was making some tests. I found out that the thing can't be injured. I hammered it with a sledge, struck it with a pickaxe, and tried to cut it with a razor blade. Last night I built a fire in that grate, and tried to burn it. Darn me if it didn't put the fire out!"

"Have you tried acid?"

"Yes. I put it in an old battery that had eaten the zincs away, but nary a scratch onto it. I tell you it's flesh of the Devil, Stanton."

THE SCIENTIST seized the sledge and administered blow after blow, but the strange object seemed to throw the

hammer off as an exploding dynamite cap might have done. With the pick he strove to drive a hole in it, but with the same result. Then, taking a sharp-bladed ax, he swung heavily. The blade scarred the anvil, but not the livid, glowing substance.

"Build up a fire again, Gideon," he said, breathlessly, as he examined the freezing bit of hide minutely.

Mentally he pondered the phenomenon. If this mysterious object, with such powers of resistance, could not be injured, it could not be a known substance. It was possible that it was not a substance at all. It must be something that was endowed with the indestructibility of the elements themselves—a force terrifying in its potency.

With a pair of tongs Gideon placed the object on two blazing logs. In less than a minute the fire had died away, leaving the two men staring blankly.

"That piece of hide, or whatever it is," the farmer was saying, "is off the monster in the camps. And if it's got hide that can't be hurt in any way, what chance has any one got against it?"

"I'd like to have this object for the purposes of analysis," Stanton said tentatively.

"Nothing doing," his companion asserted. "It's all I've got to prove my claim for the reward." He put the hide back in the tin box and placed it in the drawer. "Listen!" he added suddenly. "Don't you hear an airplane motor?"

"Yes, I do." Stanton nodded. "But what a night for flying!"

"There are no plane routes through here, Stanton. That must be the ship me and Abner has heard on several occasions. And it always comes this way on a night like this."

He paused a moment, listening. "That's another peculiar thing. I mean these funny storms that come up so suddenlike. We know weather in these

parts, but we can't figure 'em out. I got a hunch the Devil in the camps creates 'em for his own purposes. Why, the damned lightning starts from the ground, Stanton, and that ain't natural, is it?"

As something of the same thought had passed through the scientist's mind earlier in the evening, he did not scoff at the other's assertion. Certainly the tornado that had struck so peculiarly put it in a class by itself. And if a similar phenomenon had been noticed by the natives, it must hold some significance as enigmatical as the presence of the thing in the camps, and the death of old man Starrow.

"I'm going back to Lonesome, Gideon. Will you go with me?"

The farmer was so startled his mouth remained open. "Going back to Lonesome?" He stared as though he thought the scientist had taken leave of his senses.

"Yes, I'm going back, and right now."

"Well," said the other slowly, "I'm warning you that if you return in there they'll find you like they found Starrow and his dog, Watcher."

Nevertheless, Stanton was determined, and half an hour later Gideon stopped his rattling car at the bridge near the dam. That is as far as he would venture. He had given the scientist some provisions from his scanty stores, and swinging these to his shoulder, Pierce began the remainder of the journey on foot.

"If you don't hear from me in a few days," he jested, "you'll know the Devil got me, Gideon."

The farmer's face was tense as he turned his car and drove away, and Stanton did not feel as light-hearted as his parting remark implied.

III.

PIERCE STANTON had plenty of time to think as he plodded over the

rough road. The thing at Lonesome was not, of course, the Devil. As he had muttered to himself when he had first seen it, there was no such animal. But that it was something that moved and made noise after the fashion of man could not be denied. And yet there was no man, nor beast-man that weighed a ton, so far as he knew. Nor any two-legged being that left tracks eighteen inches long and twelve inches wide according to Gideon's measurements.

So far as the bit of "flesh" or whatever it was, was concerned, he felt sure that scientific analysis could identify it.

With his senses alert as he reached the ice house, but with his thirst for knowledge burning fiercely, Stanton trudged up the ridge to the camp known as Lonesome, where he had left his duffel bag, fishing kit and rifle. The lamp was still lighted on the table, and everything was as it had been. Hungrily he bolted some of the food he had brought from the garage.

His mouth was full when the sound of an ax flailing wood stopped his eating. Moving to the door cautiously he peered out. The thing was there. He could see it in the darkness, gleaming with a cold light. It stood at the fallen pine that had been toppled across the ridge by lightning.

In its great paws it swung a double-bitted ax, the size of a medieval war implement. With tremendous blows it cut the body of the tree in two. Then, as a steel derrick might have done, it picked up the heavy parts and hurled them down opposite sides of the ridge. And with no more effort, apparently, than a boy would have tossed aside a couple of drumsticks!

With the ax over its shoulder the thing faded out in the corridor of pines that led upward to the camp called Lonesome.

Although Stanton had ventured to return to the dreaded spot he had no plan

of action. The motor which sounded like that of a plane had suggested to him that something was stirring. He was ready to agree with the farmer that old man Starrow had met his tragic end at the monster's hands, but it was not so much to solve this crime as it was to learn exactly what the thing was and why it was there, that forced him back.

Crouching, but moving as rapidly and noiselessly as possible, he ran after the mysterious being, regretting at the same time that he had not brought his rifle. He might at least have blinded it with well-aimed shots.

On top of the knoll, using trees for protection, he reconnoitered. Lonesomest was the largest of the three camps. It was a good-sized bungalow, containing several rooms, and was built on a stone foundation. Inside a woodshed, whose door was open, Stanton saw the ax where it had doubtless been tossed by the demon. Across an open space, leading to the back door of the bungalow, he could make out a tower that appeared to be similar to those atop radio stations.

"I can outrun the thing at least," he mused to himself, as he crept from the shed to get nearer the larger building. Then he went sprawling over the cake of ice and the tongs!

What could this mean? Why had the monster gone to the ice house, lugged the ice up the slope, and left it there in the open? Had it heard him, and was it lying in wait? The chilling thought made him move forward more cautiously.

Had the thing gone inside the bungalow? Ordinary doors would not admit it. Obviously the wide, slanting doors against the foundation, leading possibly to the cellar, were its means of ingress and egress. But a hasty examination found these as solid as Gibraltar.

Pierce examined the doors and windows. All were boarded up securely.

He slipped around to the front, where the camp faced the lake. A broad veranda was also boarded up tightly, even though it was the middle of July.

"If the thing lives inside, he sure craves heat," he thought. "It must be as hot as the devil in there. No wonder he needs ice!"

THE STORM had blown around to the north, leaving the southern heavens dimly aglow with enough light to outline the range of mountains that fringed the large body of black water. Just opposite the camp was a fair-sized island, a blacker blotch on the dark scene.

Again came the faint whir of the mysterious plane, high overhead, as though its pilot were seeking an opening in the thick clouds that hung low over the peaks. "I'd sure hate to be up there in such a storm," the scientist mused, straining his eyes heavenward.

The clanking of heavy chains near the water's edge caused him to look down in that direction. The thing was there. It was launching a boat. But what sort of boat could sustain such weight? As he stared he saw the glowing body move out on the water.

"I have it!" he exclaimed inwardly. "The thing inhabits that island. That must be its hide-out."

Pierce dashed madly down the ridge to his own camp. He located oars and oarlocks, and these he hastily adjusted to the flatboat he had seen near the pump. The small craft was half full of rain water, but there was no time for bailing.

Launching it with difficulty he began rowing toward the island with long, powerful strokes. He figured that the monster would land on the east side, so he rowed around the opposite shore expecting to locate the other's beached craft. In this, however, he miscalculated his quarry's intentions.

As he turned the south end of the island his wet hair tried to stand on end.

There, not three boatlengths away, was the luminous being in the tub designed to sustain it. Its back was turned and, apparently, it did not intend to stop. Stanton leaned forward against his oars with such sudden force that his oarlocks slipped out and he pitched forward, into the stern. At the same instant the big tub struck his boat and crushed the bow, and the scientist barely had time to roll into the water and duck to escape the heavy oars.

Swimming under water he did not come up until he had reached the western side of the island, and there he lay and stared with the keenest interest.

The monster had dissolved in the blackness of the night, but the splash of pontoons as they struck the water three quarters of a mile away told where the airplane had come to rest. A slender beam of white light stabbed the darkness. It sprayed back and forth until it had located the monstrous oarsman, who followed its ray to the ship.

IV.

THE SPOTLIGHT disclosed two persons climbing out of the plane and into the scow. With its passengers the thing started back toward the island, guided by the beam of light.

Pierce acted quickly. If they found his boat it would suggest his presence. He was unarmed, and had no idea what type of persons were headed his way. Everything was so unusual that he was sure some sinister project was in the making. Swimming to the spot where he had tumbled into the water he failed to locate his boat. By diving he was able to touch it where it rested on the bottom. Useless.

"That's that!" he sputtered to himself as he swam around to the east side of the island and crawled among the trees near the water's edge. "If they land on the island, I'll lie as still as a

clam. If they go on to the mainland, I'll have another swim."

The fact that the monster acted as a ferryman indicated that it was not inimical to everybody. Perhaps it was a servant. But why keep it in such an isolated spot? Was it, too, a dangerous thing to trust in a populated section? After disembarking its passengers on the south end of the island the oarsman made a second trip planeward.

The landed pair made their way to a point not more than fifty feet from where Stanton lay concealed. By their voices they were man and woman, and when they lighted cigarettes with a tiny flare he caught glimpses of their faces.

The man was a giant of a fellow, with a chin of iron, while the woman's eyes glittered like those of a snake. As both wore flying togs it was impossible to see more of their countenances. But their voices, tinged with foreign accents, convinced Stanton they were not to be trusted.

"Look!" exclaimed the man abruptly, with a coarse oath. "Isn't that light on the mainland, Jeka?"

"It is, Braggadore. What can it mean?"

"I'll damn soon find out! It's at the second camp. Wait here for Guido and Lione."

"Are you armed?" she called after him. But he was gone.

Where? How? There was no sound of his entering a boat. Neither had he plunged into the water to swim. He just disappeared. It was another weird touch in an unnatural night.

Two other passengers arrived shortly, a girl and an older man. Jeka explained the absence of Braggadore as she indicated the light on the mainland.

"What can it be, brother?" the girl asked. "I thought the other camps were no longer rented."

"Probably some fisherman took refuge during the storm, sister. I hope for his sake he did not encounter Rob-

ert on his way to or from the ice house."

"Ah, you sent Robert for ice!" Jeka exclaimed. "That is good. I shall relish some nice cool drinks after this awful voyage."

"I'm sorry you are not enjoying your first visit to Lonesome," the younger woman said.

"It is a terrible place, Lione," the other retorted. "I hope we shall never have to come again."

"It is suicide to Guido's purposes, as you know."

"Robert encountered two obstacles on his trip for ice," Guido explained. "The first he tossed out of his way without effort, but the second was more of a problem. He had to chop it in two. Probably a large tree had been blown down. Robert has gone for the baggage."

Pierce dared hardly breathe. The more he heard the more obscure did the whole affair grow. They referred to the monster as Robert. Guido knew it had gone for ice. He had sent it, he said. How? Was there a telephone on the island? And if so did the monster have sufficient intelligence to answer it? Could it talk as well as howl with rage?

It must be able to convey intelligence in some manner, for Guido knew it had encountered two obstacles. But he did not know positively what the obstacles were. Which could only mean that the man-beast, or whatever it was, could indicate in some way its experiences but could not describe them in detail.

The scientist's flesh began to turn cold as he heard the mammoth thing crashing its way through the underbrush. From the sound of its tread it was headed directly at him. The others had used a path to reach the point where they now stood conversing, but the creature stalked straight as an arrow, as contemptuous of barriers as a war tank.

STANTON'S first impulse was to rise and dive into the lake. But this would hardly have been wise. The thing would have pursued and caught him, and he would have been as a tooth-pick in its clutches. The others might urge it to destroy him as it very likely had destroyed old man Starrow, by doing him up to resemble a bow on a Christmas package.

On the thing came. Pierce lay still, squeezed in between trees and boulders. It seemed to shake the island with its ponderous tread, and to throw off some strange force as it advanced with the crunch of a death-dealing Juggernaut. He could sense that gigantic foot cracking his spine as if it were the tenderest twig.

Sweat poured off his face as he realized it had stepped over him. And he was sure the group of three must have heard his explosive sigh of relief. His fingers were full of gravel his tensed hands had dug up as he awaited his end.

"Will you need Robert any more tonight?" Jeka was asking.

"I hardly think so," Guido replied.

"Then into your cell, sweetheart," the older woman chirped, apparently bestowing an affectionate pat on the hairless monster. And, as the man called Braggadore had done, the creature disappeared noiselessly. Pierce then surmised that a trapdoor and tunnel must lead from the island to the cellar of Camp Lonesomest.

But the scientist was thinking of something else. Of the woman's use of the word "cell." Did this monstrosity have to be imprisoned in a cell like a criminal? Was it not reasonable to suppose, had it been an animal, that she would have used the word "cage"? But if it were an animal, why had it not scented his presence as it stepped over him? Or heard the crash of his boat. Could it neither hear nor smell? It was too confusing.

Braggadore returned, swearing

roundly. "There's a spy in camp!" he declared irritably.

Guido whistled. "Are you sure?"

"Positive, damn it! His things are at Lonesomer. And his car is down the slope."

"That's what Robert pushed out of his way."

"His things are there," Braggadore repeated. "Fishing rods, baggage and food. Evidently he intends making a night of it."

"Wasn't he at the camp?" asked Lione.

"He was not. I went through everything, and brought his rifle back to be on the safe side. Apparently he had just arrived. He had lighted a lamp and started to eat some supper."

"Perhaps he saw Robert and fled," Jeka suggested.

Braggadore ripped out an oath. "He'll lose his life if he tries to interfere with me. He'll get what old man Starrow got."

There was a moment of complete silence. Then Guido spoke, coldly. "Mr. Starrow met a horrible end, an accident I cannot account for to this day."

Jeka lighted a fresh cigarette. "Would it not be wise to let Robert roam around to-night, just to keep any snoopers away while we are here, Guido?"

"An excellent idea," Braggadore agreed.

"No, I don't think it is," Lione dissented. "And I do not think my brother will listen to it, will you, Guido?"

"Certainly not, sister. If there are snoopers, as you call them, that is the time to keep Robert concealed. We must not run the risk of hurting any one."

This caused Braggadore to laugh harshly. "You are as weak as water, Guido Panchette. And as funny as a monkey. Afraid of hurting any one, indeed! Why, that's precisely what we

are here for, isn't it? To determine to-night how to hurt the greatest number of persons without injuring ourselves."

"That may be your ambition, Braggadore, but I'm not so sure it's mine. I have not made up my mind completely."

"Bah!" exploded the giant wrathfully. "You had better go to the camp, you and your sister, while Jeka and I stay here to finish our cigarettes."

"Very well," the younger man assented quietly. "Come, Lione."

The two young people descended through the trap, which closed automatically after them. As soon as they were gone the snake-eyed woman turned fiercely on her companion.

"I understood he had agreed to everything, otherwise I would not have made this journey."

"He blows hot and cold," the man growled. "This way one minute, that way the next."

"Have I come all the way from Europe on a fool's errand, Louis?"

"No. Everything will be all right." Then he added significantly, "With or without his consent."

THEY SMOKED in silence, and Pierce could see the bright glow of their cigarettes. The wind was still blowing strongly, dashing water against the rocks, and storm clouds continued to blacken the skies.

"What is this spy up to?" Jeka demanded finally.

"How do I know?" growled Braggadore. "He may be the secret agent of some other nation. But I'll kill him if he tries to interfere, just as I killed Starrow."

"Ah, you killed him," the woman said softly.

"I didn't," he corrected himself. "Robert did. But if it had not been for me the old fool would have exposed us. That was the winter you went to

India. I came here for six weeks without Guido's knowledge to carry on my own experiment. My greatest difficulty was to keep Starrow from seeing Robert. So I released him only at night. But the old fellow was curious. He fancied we had a bootlegging still in the camp, and I let him think so.

"One night, however, although Starrow usually went to bed early at the camp near the ice house, he remained up and began to snoop. When he saw

Robert he became panic-stricken. He declared he wouldn't remain on the premises, and wanted to tear up our lease which had nearly two years to run."

"Wasn't Starrow around when you installed the apparatus?" the woman interjected.

"No. We arranged for him to go to Connecticut for some special supplies we called for."

"Go on."



*The thing must weigh a ton! There were no horns
or a tail—but there should have been!*

AST—9

"Well, I tried to humor him in an effort to get him to keep our secret. I showed him Robert was as harmless as a baby. I even put on an exhibition, and had Robert strike down trees with two blows of his ax, and hurl boulders to great distances.

"Naturally, the old fool was flabbergasted at such strength. Then the unexpected happened. He had a dog. It was always at his heels. I had forgotten it. Suddenly, with its hackles straight on its neck, it leaped at Robert and tried to sink its teeth in his hand. The next thing we knew the dog was crushed and was hurled high through the air.

"The old man loved that dog and the sight angered him to desperation. He grasped an ice pick and dealt Robert a savage blow in the chest. He was a strong man and the blow had a fearful reaction. The old fellow was hurled against me and I went down. I thought he was going to kill me, so I spoke to the disk too excitedly, perhaps. Robert seized Starrow and twisted him into knots. Later I discovered that a piece of Robert's chest, about six inches square, was missing."

"If Robert is indestructible——" Jeka's voice was tense.

But Braggadore cut her off. "That was two years ago, and set back my negotiations. But Guido has been working on the defect ever since." He went on with his explanation. "I sent Robert to his cell. In a way I was relieved. Starrow would have ruined us. I got his body, put it aboard the plane, and dropped it in the mountains about seventy miles north. The next day it snowed heavily and it was weeks before the remains were found. But no one even remotely guessed the truth."

"You did not come back here immediately, of course?"

"Police and detectives investigated, but found nothing. They got into the cellar, but they had no suspicion of the

subcellar, where our apparatus is. The subcellar was my idea, when we built the tunnel to the island."

"And Guido Panchette has never been able to understand Starrow's death?"

Braggadore laughed cruelly. "What has puzzled Guido all this time is how Robert got out of his cell, what became of the segment of flesh missing from his chest, and how he could have tied any one in knots. That, my dear, is something I discovered through the accident, and will be a marvelously effective argument abroad."

Jeka clasped her hands enthusiastically. "Then you know as much as Guido does about Robert, Louis!"

"We have no further need of Guido Panchette," he said contemptuously. "To-night you will help me bring him to a settlement, and we'll be on our way to our reward."

"You mean——" Her voice was a hiss.

"I mean," he repeated, "that within a matter of weeks our king will have the means to return to his throne, and a weapon powerful enough to crush all his enemies. Or the rest of the world, if need be!"

There was a long pause, then Jeka asked: "Did you not hear something, Louis?"

"Only the storm," her companion retorted. "Let us go inside to that furnace of hell. Have you your hood?"

There was sound of their departure by way of the tunnel, and then only the wail of the winds to keep Pierce company. He lay for several moments, listening intently, before rising to free himself of kinks. He was beginning to realize the bigness of the intrigue in which he had become involved.

V.

THERE WAS no time to lose. He must reach the mainland, and get into

the cellar, or subcellar, to see what it was all about. The aliens had mentioned a weapon powerful enough to crush the world. If they possessed such a force, and it was their intention to place it at the disposal of some scheming foreign monarch, then his duty, as a loyal American, was plain.

His first move was to reach the spot where the others had been. He found nothing. Thick brush hindered his search for the opening to the stairway which had been cunningly concealed from possible fishermen or hunters.

He thought of the scow at the other end of the island, and there he made his way. But here another disappointment met him. The craft was so bulky, and had been drawn so far on shore, that Pierce could not budge it. Only Robert's superhuman strength could launch such a tub.

There was but one way to reach the mainland, and that was to swim. So he slipped into the black water and started. He was sure he could find some means of entering the bungalow when he got there.

His mind sizzling with conjectures, the farthest thing from his thoughts, as he plowed the water with long, overhand strokes, was to strive for quietness. The words and actions of Braggadore and Jeka had characterized them as highly dangerous persons. Apparently their proposition was of such tremendous significance that they would not hesitate to sweep their associates, the gentler Guido and Lione, out of their path without compunction.

The sharp crack of a rifle, and the sinister ping of a bullet, as it stung the water near his head, and then ricocheted into the woods, startled the swimmer, and made him dive with the alacrity of a loon. He swam under the surface for some distance, straight toward the center of the lake, before coming up for breath. Then he rose as a turtle rises, thanking his stars for the storm.

Here was a situation he had not contemplated. Obviously Braggadore and Jeka had heard him in the brush, and had only pretended to enter the tunnel. They were now standing on the island trying to pot him with his own hard-shooting .30-30. And there were sixteen cartridges in the magazine.

Just what to do was a problem. He could gain the opposite shore, swimming under water and coming up cautiously. But that would be leaving the scene, and he had no intention of doing that if he could help it. These people intended finishing something that night, and to-morrow they might be on their way. He had to stick.

To go to the mainland now was out of the question. Braggadore had the rifle, and there was no sense making a target of himself for a cold-blooded murderer. As he paused, in the deepest part of the lake, wondering what to do, a flash of lightning solved the matter.

The giant alien was in the water, swimming steadily toward him. In his mouth was a stiletto. Another crack of the rifle brought a bullet too close for comfort, and Stanton realized that Jeka was doing her best to assist in the assassination.

Pierce circled warily. If he could best Braggadore that would be one less to contend with, but he knew this would not be an easy task. Turning, he made straight for the alien, and the two came together. As they did so, Braggadore grasped the knife and struck upward, savagely, at Stanton's stomach. The blade struck his waistline, but thanks to a metal bait container still attached to his fishing belt, the blow was deflected.

The scientist clamped his fingers around the alien's wrist and held on like a vise. With his free hand he sought to land a blow on the jaw. But the other was striving to do the same, and the waters were churned as by a

pair of battling sharks. On the island the quivering Jeka dared not fire again.

Stanton was in splendid physical condition, and was an expert water poloist. But he had never had a double-edged knife against him, and this considerably added to the hazards. Furthermore, sportsmanship meant nothing to Braggadore. He kicked with his feet as ferociously as he struck with his free fist. He tried to use his teeth to sink them in Stanton's neck. Suddenly he threw his arms and legs around the scientist's body to drag him under.

But one man's lungs were as strong as another's, and this dodge did not work. They came up again, still locked together, panting like a couple of bulls with their horns interlocked. The alien tried a hammer lock but unsuccessfully, and Pierce seized this opportunity to land a smashing blow on the jaw. He felt the other's hold relax, and Braggadore disappeared under water.

Then came another flash of lightning, to be followed instantly by the crack of the rifle and the singing of a bullet near his head. The snake-eyed woman was determined to kill, and Pierce decided he had best get to the opposite shore temporarily. But before he had taken three strokes he heard Braggadore above water again. The foreigner had tricked him; had gone down for a brief rest.

STANTON'S blood was boiling. He would try to put the battle on more even grounds. Or waters. With a high-powered rifle, and a stiletto in the hands of a murderous giant against him, the odds were too one-sided.

He, too, went under, away down, until he could touch bottom. Here he groveled until he had located a good-sized stone, twice the size of his fist. With this he shot to the surface, and could see Braggadore thrashing around like a dog after a lost stick.

Pierce let him have the missile. His aim was accurate. The stone caught

Braggadore full in the face, and the knife spun away. Cursing coarsely, the foreigner struck out for the island, as fast as he could go. His intention was plain. He would take the rifle and pump its contents into Stanton before he could escape.

Stanton, however, outthought his adversary. By swimming under water he quickly gained the vicinity of the opposite shore where the blackness hung so heavily he was able to swim above water without fear of detection, and although Braggadore fired several shots they went wide of their intended mark.

There was but one place for him to go—that was the plane. Here he might find some weapon with which to defend himself. It was a long swim, but not a difficult one, and it gave Pierce time to collect his wits, and to conclude that he had never been in a more desperate undertaking.

The problem had been lifted out of the realm of scientific mystery into the highly explosive atmosphere of foreign intrigue, at a time when half the world was sitting on kegs of dynamite.

The plane was in darkness, tugging at its anchors. It was built like a bomber. Crawling up on a pontoon he rested there several minutes. Then he began to search for the door. But the sides of the ship were rounded and solid. A series of iron rungs back of the engines, however, enabled him to ascend to the top, which was formed by two long doors, one of which was partly open. Dropping inside, he made his way to the glass partition in front where a tiny bulb was lighted. Opening a door he saw four seats, two behind the pilots'.

An expensive plane, judging by its equipment, its instruments for blind flying, and other up-to-date accessories. Pockets in the seats contained many things—tools, maps, bunches of waste, and a portfolio, but no firearms. Then

he gave a chuckle of satisfaction. He had found some cigarettes and a lighter.

Crouching, he lighted a cigarette, drew several contemplative puffs, and then returned to the body of the plane with his miniature torch. In addition to extra fuel tanks he saw what appeared to be a large cot, made of aluminum, that could be lowered or raised by means of a winch.

"Robert's bed!" he exclaimed. "That must be the way they transport the monster!" He recalled newsreel pictures he had seen of planes carrying baby tanks aloft, to drop them in parachutes on a supposed battlefield. Was it Braggadore's ambition to introduce a more startling innovation with the aid of Guido's indestructible monsters?

Stanton began to rifle the portfolio. The first thing his hand touched was an icy object similar to the piece of skin in Gideon's garage, but it was as thin as tissue, and as transparent as cellophane. Evidently it was a refinement of the coarser hide with the element of weight eliminated. But it had the same luminous attribute. He recalled Braggadore's remark to Jeka that Guido was still working on some defect.

There were also many papers, mostly in a foreign language, and they were dated from 1772 to 1930. All were signed "Panchette."

"Obviously," murmured the investigator, "these papers are by the present Guido and his ancestors—records of some work handed down through the generations in the same family. Hello! What may this be?"

He had come across a table of one hundred numbered elements, with their atomic weights, arranged according to the periodic system. In the columns headed "Discovered" and "By Whom" were the dates 1772 to 1930, while back of certain elements was the name Panchette.

Stanton blew the peculiarly scented smoke of the cigarette through his nos-

trils as he studied the chart, while rubbing the tips of his fingers over the icy object on his knees. Was he close to the monster's secret? Had this Panchette family, through one hundred and fifty-eight years of research, fused certain elements into the form of a man which was alive with a resultant energy similar to, and yet differing from, that of a human being? It was a mystery or a miracle still far from solution by his individual scientific knowledge.

Suddenly he felt in awe of the strange thing on his knee. Was it fear or some other sensation that was causing him to grow dizzy? Had the transparent skin exerted some peculiar influence on his senses? Certainly his brain was being attacked by some force that was overpowering him.

The half-smoked cigarette dropped from his numbed hand. He tried to put out the little lighter, but his fingers refused to function. It seemed to him, with the ray of intelligence remaining, that he had gone silly.

He could not be seasick, although the plane rolled at its anchors. Perhaps he had grown weak from want of food, for he had eaten but little during the day and the strenuous evening. Now the lighter dropped to the floor and rolled under a fuel tank. To his horror he saw it ignite some gasoline. He lurched forward, striving to steady himself, while he sought to stamp out the blaze. But his efforts were futile, and the fire began to spread.

He fell against the aluminum cot, suspended at the side of the plane. Using its structure as a ladder, and exerting all his remaining strength, he started to pull himself upward. His body acted as a dead weight, as though paralyzed. But by sheer desperation he dragged himself to the open door above as the flames licked his feet.

As he scrambled out on top in the night air he was beset by an equally startling peril. Not more than three

hundred yards away came the livid monster in his tub, rowing strongly, and standing in the bow as Braggadore, directing shot after shot as he drew nearer, as fast as he could work the ejector of the repeating rifle.

With his remaining gleam of consciousness Stanton rolled from the plane into the water.

VI.

THE AIRSHIP was now burning fiercely and Braggadore's first thought was to put out the fire. He was swearing loudly and coarsely, for he was sure the spy had deliberately sought to destroy the only means the plotters had to leave the lake. At the risk of his life he sprang out of the boat upon a pontoon and climbed the iron rungs.

But the flames beat him back. He barely had time to leap into the water and gain the scow, when a fuel tank let go with an explosion that tore the ship apart. It sank almost immediately, and the livid monster rowed to escape the wreck.

Meanwhile, Stanton, who had tumbled into the lake on the opposite side of the plane, was hazily conscious of being drawn through the water by some invisible force. How far he had moved he did not know. Gradually, however, his head cleared of the frightful pounding that threatened to split his skull, and he was able to determine what was happening. Some one was swimming by his side, holding him up.

"Who is it?" he asked in a low tone.

"It's me," Gideon replied in a gasp.

"But I'm all in."

"I'm all right again," the scientist said. "I can swim by myself, Gideon."

"Glad you can," the farmer returned feebly. "I can't make it to shore, Stanton."

"Turn on your back and rest a moment, old man. I'll help you."

When their feet finally touched bot-

tom and they were able to stumble to firm ground, the two men dropped, exhausted. They heard the ship blow up and saw it sink as Braggadore and his oarsman returned to the mainland.

"First," said Stanton, "I want to thank you for saving my life, Gideon."

"Shucks, it was nothing. You saved mine, too, didn't you? I guess you agree with me now about that monster, don't you?"

"I'll say I do," the scientist replied.

"And what's more, I think you are entitled to that reward. But more of that later. How did you happen to be at the plane?"

Gideon told him he had heard the shooting and had ventured to the lake to see what was up. "I thought the thing had you cornered," he added, "and I was so excited I plumb forgot to bring my gun. It wouldn't have done no good nohow, would it?"

"Not a bit, Gideon, so far as the monster is concerned."

"When it lightnined I saw you climbing up on the plane, and I thought it would be safe to mosey out to you. But when that demon loomed into view I damn near sank right then and there. I was going to start back, but that guy standing in the bow started peppering at you, and that changed my mind. I decided to get into it no matter what happened. I was sure you were dead when you tumbled into the lake. But you weren't hit, were you?"

"No." Stanton laughed. "He's a rotten shot. But I would have been gone if it hadn't been for you. I found some cigarettes in the plane and smoked one. It must have been drugged. It paralyzed me. I didn't have strength enough to put out the fire started by the lighter. All I could manage to do was to crawl to the top and drop off, or I'd have been burned to death."

He related in detail the episodes of the night, and Gideon listened, open-mouthed.

"How far is the nearest telegraph station?" Stanton demanded abruptly.

"'Bout eighteen miles away, at Wolf-ton."

"I've got to get a telegram off immediately, but I have nothing to write on."

"That's easy," Gideon said, taking out a large pocketknife and stripping a square of bark from a white birch. "Just like paper, this is."

"Good! I've some cartridges in my pocket, and lead is as good as a pencil."

He began writing the message. "I have some friends in Boston," he explained. "One of them, named Dickson, is vice president of an airways concern. Get that telegraph operator at Wolf-ton out of bed, and tip him five dollars. Here's some money. On the way back in your car pick up that revolver of yours, and meet me at the dam."

The two men started running through the woods toward the north end of the lake.

"This thing is so much bigger than we thought, Gideon, that we'll need all the help we can get. I've called for as many pontoon ships as my friends can muster on short notice, with whatever wrecking tools, guns and other equipment they can gather together quickly."

"But if this monster can't be hurt in any way, what good will that stuff do, Stanton?"

"The monster may be indestructible, but those who control it aren't," the scientist explained. "And they are armed. I'd like to capture the thing and look it over, study it. Think of the possibilities of ten thousand such beings turned loose on a battlefield! Every nation with war ambitions has its experts working day and night, searching frantically for some death-dealing innovation with which to surprise and annihilate its enemies."

"But you ain't found out what the monster is, have you?"

"I'm on a hot scent. The thing isn't

beast or human. But it sure is lifelike in every respect, except that it can't see, hear or smell. They call it a name that sounds like Robert. That may be a distortion of robot, or mechanical man, but the human name is applied because it is nearer human than any mechanical device. I'm positive it's alive, but what gives it life and such strength is beyond me."

They had reached a spot near the dam, opposite the camps. "I'll wait for you here, Gideon, unless something develops that forces me across."

"You sure ain't going over there again unarmed, are you, Stanton?"

"Circumstances will have to determine that, old man. I certainly am not going to see this fellow Braggadore get away if I can prevent it. Remember, he's Starrow's murderer." He crouched in the grass at the water's edge as Gideon ran off through the Cobb farm toward his garage.

The scientist could not suppress a grin of satisfaction as he thought of Braggadore's rage at the loss of the plane. "That evens up his attempts to kill me," he murmured to himself.

The storm had passed, and the skies had cleared somewhat of their rolling clouds. The stars were trying to peep at the earth. Stanton had become oblivious to the wet clothing that clung to his body.

THE FACT that the destroyed ship did not lessen the efficacy of the monster, suggested—if its power did not originate within itself—that it could be controlled elsewhere. The subcellar at Lonesomest must have something to do with it, and that was a detail Stanton was most anxious to unravel. In his conversation with Jeka, Braggadore had mentioned a disk.

Stanton stood up. Across the water he had suddenly become aware of a figure in a white dress running down the ridge from the corridor of pines.

It was a smaller woman than Jeka, so it must be the girl, Lione. Her frantic voice was wafted in his direction.

"Guido!" she called. "Guido! Where are you, Guido?" The voice rose to a cry of anguish as the girl stumbled down the roadway, and entered his camp. By the light of the lamp, which remained burning, he could see her run out again and disappear.

What could it mean? Where had her brother gone?

Another voice boomed after her. "Lione, come back here! Guido will return when he gets ready! He has not gone far! Come back, I say, you little fool!" It was the angry tone of Braggadore, and his commands were echoed by the woman, Jeka, who followed the alien from Lonesomest, trying to induce the hysterical girl to return. They went over the shoulder in the direction of the third camp, still calling.

Pierce was in the water up to his waist. He had decided not to await Gideon's return. It was a short swim across, and the temporary absence of the others gave him his opportunity. He left the water directly in front of his camp, but did not enter it. Instead, he crept around to the back, and listened. He could hear Braggadore and Jeka still calling to the girl, whose voice was silenced.

"For the last time, you little fool, are you coming back to the house?" As there was no answer the big alien started to tramp up the ridge, with his companion after him. They paused almost directly in front of Stanton's camp, at the side of which he crouched in the darkness.

"To hell with her!" the man said gruffly.

"We don't need her any more anyway, do we, Louis?"

"She's apt to make her way to some farmhouse and give the alarm, and we

may be interfered with before we can get away."

"How can we get away without the plane?" the woman demanded.

"There's the car that belonged to that spy. We can use that, can't we?"

"But how can we get Robert in that car?"

The man swore impatiently. "We can chain him on the top. Campers in these mountains carry their canoes and outfits that way."

The woman was panting for breath. "I'll be glad to get out of this cursed country and on the ocean again, Louis."

"So will I."

"Are you sure you have all the formulas, so that nothing can go wrong?"

"Am I in the habit of blundering, you fool?"

"Are you positive you killed that spy?"

"As positive as I am that I am talking to you."

The snake-eyed woman was extremely agitated. "I can't escape a feeling of insecurity as long as we are uncertain of Guido and Lione," she protested.

The man blazed back at her: "I should have followed my first impulse when we had them both in the sub-cellar. If the spy hadn't set the plane afire we would have been on our way by now. And when we were at a safe distance I could have blown the camp and every one in it to hell. Come on. We'll have Robert yank that car up the slope and be on our way. We've got to find some means of securing him to the top."

They disappeared in the direction of the knoll above.

The diabolical intentions of the pair chilled Stanton's blood. There was no limit to which they would not go to succeed in their purpose; no risk too great to attain their heinous ambitions.

VII.

HIS immediate concern was the girl. What had become of her? Had she found her brother, and were they together fleeing for their lives? A slight noise caused him to step forward and peer over the slope. There he saw Lione, crawling upward on her hands and knees. As she reached the top she saw him, uttered a cry of alarm, and would have toppled over backward had he not caught her.

"Don't be alarmed," he said reassuringly. "I want to help you."

She stared at him. "Are you the spy?" she gasped. "Braggadore said he had killed you!"

"He exaggerated slightly," Stanton chuckled. "He didn't even hit me."

"Oh, I'm so glad," she whispered, growing limp against him. He picked her up and carried her inside the camp, where he put out the lamp. They sat on the couch in the front room in darkness. He told her his name.

"Where's your brother? Did you find him?"

"No," she replied in a quivering voice. "I'm afraid he's dead. He smoked a cigarette that I'm sure was drugged."

"Those cigarettes don't kill, Miss Panchette. I smoked one in the plane. It knocked me out, but I'm all right again. I'm sure your brother is about somewhere, and he's much safer out of that trap than in it." He then related all he had overheard between Braggadore and Jeka.

"I've had a feeling that they intended killing us, Mr. Stanton, but I never dreamed they were that desperate."

As one of her arms was badly cut by underbrush, Pierce got some handkerchiefs and iodine from his duffel bag and began bandaging it.

"Tell me something of yourself and your brother," he suggested, as he

worked as best he could in the darkness.

She seemed greatly relieved in finding some one she could trust, and although she was agitated to the point of hysteria his touch soothed her somewhat. She spoke with a rush of words that sounded incoherent at times to the kneeling scientist.

"Guido and I are orphans," she began in a low, musical voice with a shade of accent. "We have lived in America since I was a little girl. We came here so that my brother, who is much older than I, could carry on the work of our forbears. His studies are purely scientific, but certain factions in Europe have been striving to gain possession of the Panchette secret for purposes of destruction.

"These people—Braggadore and Jeka—are former countrymen of ours. They are ambitious to put the former king back on the throne, and make war on his enemies. But we are not in sympathy with such aims. I think Braggadore's real purpose is to set himself up as a dictator. Jeka brought large sums of money from abroad.

"Some years ago Braggadore succeeded in locating us and has been hounding Guido, under the plea of patriotism, to part with his formulas. But my brother has resisted his overtures for two reasons: he is pacific by nature, and abhors the thought of war, and the Elemesium Man is far from perfect."

"The Elemesium Man?" Stanton repeated softly. "That's what the monster is, ch?"

"Please don't refer to Robert as a monster, Mr. Stanton," she replied seriously. "He is a relative of mine, you know."

"A relative of yours!"

She hesitated a moment as she thanked him for bandaging her arm. "I suppose there is no harm in telling you certain things as you are the only

person Guido and I can depend upon in our predicament. And it is only fair to warn you of the terrible danger you are in as a result of your kindly offices."

He patted her shoulder as he sat beside her. "I've learned something of that danger, Miss Panchette, but we are all in it together now. One for all and all for one, you know." His words calmed her momentarily, and she went on, speaking rapidly.

"ABOUT a hundred and fifty years ago the Panchette family consisted of thirteen children, all men, at the death of the father and mother. Robert was the eldest. They were savants as their ancestors had been, in various fields of science. Some were chemists, some biologists, some astronomers, some geologists, etc. Many discoveries were made. They recorded some—those they felt would benefit mankind—others they kept secret.

"The finding of 'elemesium,' an element derived from 'forbidden light,' was considered by them as their greatest accomplishment. Look above," she said suddenly. "Have you ever seen as many stars anywhere with the naked eye?"

"Never," Stanton agreed. "There must be millions of them."

"Billions," she corrected. "That's the Milky Way Galaxy. It's estimated there are two hundred billion stars in that cosmic disk. The reason you can see so many is that this particular belt through these mountains is atmospherically unique. It took Guido a year to locate it. He posed as a fisherman, but he was really in search of just such conditions as are to be found in this locality. The place also offers the ideal setting for the creation of his storms, in which he feels it necessary to cloak his presence."

"What?" her companion exclaimed. "Your brother has the ability to create artificial storms?"

"Oh," she said, "that's one of his minor accomplishments. Didn't you notice the radiant tower near the bungalow? When his synthetic disturbances bring on natural ones the result is quite lively. Robert, of course, manipulates the radiators."

Feeling that she was wandering from the main thread of her revelations, Stanton sought to lead her back. "This 'forbidden light' from which elemesium is derived?"

"It can be transformed and utilized here more easily than elsewhere. That's why I called your attention to the stars. Elemesium comes from a very distant star which the Panchettes have designated as FW. FW's temperature on the outside is 180,000 degrees Fahrenheit, the highest heat ever recorded. What it is inside is beyond calculation. The highest temperature ever previously recorded, all on stars, was about 40,000 degrees. The temperature of the sun, you know, is only 10,000 degrees."

"I thought the sun was the hottest body," Stanton said.

"It may have been at one time, but it's exhausting itself. The Panchettes have calculated that the present sun is at least the tenth since the beginning of time, as we reckon time. Some day, millions of years hence, it will be replaced by another. And so on, *ad infinitum*. The world, you know, has a continuing system; each particle or nebula has an evolutionary experience, behind it and in front of it, with ultimate decay as its goal, yet the world as a whole cannot be said to decay. Creation never recedes into the past. It is only just beyond the limit of observability in our own present.

"It seems," she continued more slowly, striving to simplify her explanation, "that members of our family pursued parallel lines of research. One branch explored the earth and its composition, while the other studied the

skies, and their—er—tenants, to put it crudely.

"Before the invention of the spectroscope by the Panchettes nearly two hundred years ago——"

Stanton interrupted quickly: "Two hundred years ago! Why, I thought the spectroscope was a comparatively recent discovery."

She ignored the remark with a shrug of her pretty shoulders. "Before the invention of the first spectroscope the composition and condition of stars and other distant astronomical bodies was largely a matter of conjecture, or, at best, scientific probabilities. But with it my family was able to identify, positively and quickly, most of the ingredients of far-off stars by analyzing and re-creating the light shining from them. Light from these nebulae, traveling at the rate of 186,000 miles per second, requires millions of years in transit to the earth.

"But what is known as 'forbidden light' never reaches the earth at all. It is filtered out by the layer of ozone which surrounds us. This peculiar light, found in abundance in the powerful energy of tremendously hot stars, excites the atoms of hydrogen and helium which are in the stars. As these stimulated atoms return to normal after the excitation they give off the type of light that reaches the earth. The light which excites them, however, is of that type which the stratosphere absorbs."

She paused a moment, and then added quietly, "It is of this type of light that Robert is composed."

STANTON straightened at her side and stared at her in the darkness. "You mean to say that a being that weighs a ton is composed of light, Miss Panchette?"

"I admit, Mr. Stanton, that I explain things badly. It is not of the light itself, but of the ingredient of the light

—elemesium soil—that constitutes a component part of my relative's re-animation."

Stanton was at a loss, although, being a scientist himself, he knew that there must be a good scientific explanation. Well, he could learn.

Sensing his confusion, perhaps, the girl said: "I suppose I should go back and tell you something of Robert's history, Mr. Stanton. At the age of forty his life was accidentally suspended by a severe shock from the 'forbidden light' apparatus invented by the Panchettes for the purpose of experimenting on tissues, organs and fibers of animate and inanimate objects. Their theory was that all matter is energy—that it becomes matter when it can be seen, and that all things in existence contain elemesium in varying degrees, thus accounting for the difference in age, strength and density of all substance.

"At that time they had already learned the feasibility—through radiant agitation—of keeping alive the tissues and organs of human beings, animals, fish, birds and reptiles indefinitely, and accelerating their growth. They could metamorphose a barnyard fowl into an ostrichlike bird, a twig into a tree, alter sex or eliminate it altogether, in a comparatively short space of time. They could magnify sound—such as the beat of the heart into the roar of Niagara—as it is done to-day by the radio-vacuum tube. And by withdrawing the elemesium energy from an elephant, for instance, they could render it as harmless as a mouse.

"Instead, therefore, of burying Robert they preserved him for purposes of experimentation. Although some of his senses had escaped, never, as yet, to return, other attributes remained. They discovered that he could no longer see, hear, smell or taste, but that he could feel. His hair disappeared entirely, while his bones and tissues underwent amazing transmutations. His blood be-

came a new life current that sustained him without other sustenance.

"Although a frail man through life, his physical strength developed to an alarming degree and, when emotionalized, he became as dangerous as a mad monster. He became unmanageable, like a giant under the influence of liquor, only a thousand times more dangerous. Within a year he had killed four of the brothers by tearing them to pieces. But all had dedicated their lives to their work, and there was no thought of giving up.

"Of course," she continued, by way of parenthesis, "psychologic literature contains much data regarding the pulse, blood pressure and other psychologic variables in individuals during and following the application of a stimulus intended to produce an emotional state. But, until the Panchette experiments, the question was whether the stimulus, artificial as it had to be, was in any way comparable to the stimuli received by people under the ordinary stress of life.

"The brothers' greatest problem was to discover means to *control* the man they had elemesiumized, and that led to the invention of the 'actinic disk.'"

"Actinic disk?" Stanton repeated.

"Actinism, as you know, pertains to the property of radiant energy, luminous and nonluminous, which effects chemical changes. This little instrument might be compared with the radio microphone and amplifier combined, only thousands of times more powerful. It's about the size of a lady's wrist watch. By agitating it with voice waves, vibrations are set up which impinge upon the tympanum of Robert's auricle, which arouses his emotions and causes his actions."

"Then he *can* hear?"

"Not in the accepted sense, he can't. But neither can ships, airplanes, robots or other mechanized devices 'hear' the radiated impulses that guide their move-

ments. Like these Robert reacts to actinic impulses, but with this difference: the actinic disk loses its efficacy when deprived of human contact, and Robert becomes 'deaf' or inanimate or harmless."

"I don't quite grasp that, Miss Panchette."

"To illustrate! Whoever possesses the disk and knows its delicate vibratory sensibilities, can impel Robert to do his bidding just as one human being speaking to another, or as one commanding an animal to do tricks."

"And how many of these disks are in existence?"

"Only one."

"Then if it is mislaid, Robert's power is gone?"

"Exactly. I have suspected that Braggadore has stolen it from time to time when Guido thought he had mislaid it."

"Braggadore certainly had it the night Starrow was killed."

"There's no doubt of that," she agreed.

"And am I to understand that this re-animated relative of yours, Miss Panchette, has been existing for a hundred and fifty years?"

"He has."

"But where and how has he been kept concealed all that time?"

"That has been one of the most difficult obstacles to overcome, Mr. Stanton. My family never had much money, and to keep the secret was hard. They moved from place to place, country to country. Some of them married, and that didn't help, for women will talk, as you know. Jealousies split the brotherly bond, and superstitions became rife. Most of them were deeply religious, despite their scientific attainments, and when their re-animated relative began to assume the aspects of a monster they became alarmed, thinking it was retribution for attempting to experiment with life."

"Is it possible that this 'forbidden light' accentuated or brought out your relative's baser nature?"

"That's what some of them thought, no doubt."

"And is it also possible that these peculiar rays, by some restriction, were never intended to reach our earth?"

"I've had a similar idea." She nodded. "Which is probably the reason that no Panchette has ever attempted to experiment on any other human being, and why they have refused to make their discoveries public. Can't you vision a world inoculated with artificial elemesium?"

"I can, and it makes the blood freeze."

SHE WENT ON with her relative's history. "Robert was finally stolen by the youngest brother, a rebellious fellow who was determined to carry on. He fled to South America, and hid himself in a subterranean domicile. He married and had a son, our grandfather. In time he married and had a son, our father, who brought Robert back to Europe. I suspect that the wives died of fright at having to live with the being you think of as a monster."

"Now where does this actinic disk derive its power, Miss Panchette?"

"It is self-charged from the instruments in the subcellar. It contains enough power to operate independently for a long time. It's capable of blowing both Robert and the camp out of existence, through excitation, if called upon to do so."

"Do you think Braggadore might resort to such destruction should he find it impossible to get away with the secret?"

"I have no doubt about it, Mr. Stanton, and that is what I was thinking when I warned you of the great danger you were in."

"Well, as I said before, Miss Panchette, we're all in it together now."

"I admire you, Mr. Stanton," she re-

plied feelingly, "because you seem dependable."

As she arose abruptly, he pressed another question. "Granted," he said, "that the tissues, blood and bones of your relative have undergone this strange metamorphosis through the fusing of elemesium, does that also account for the icy-coldness of the skin?"

"Guido's explanation of that is that this frigidity is caused by a fixed idea. These fixed ideas—especially religious ones—can produce profound changes in the vegetative system, particularly in the blood which is of an ultra-ray nature, and where an excess of sulphides is caused. Sulphides have the property of becoming luminous when they are excited by ultra-violet radiations.

"You've heard, of course," she went on, "of fears that freeze a person, deep grief that kills, sudden fright that turns the hair white. I'm inclined to believe that Robert's fixed idea is one of fear, despite his strength, which keeps his skin at a low temperature at the thought of destruction. He was a pacifist, and his agonized cry—which is still a mystery to my brother—is really an outburst of horror at being compelled to hurt any one."

She broke off suddenly. "Guido!" she recalled. "I must find Guido!" They were startled at that instant to hear Braggadore's voice outside. He was speaking to Jeka, and Stanton and Lione pressed near the window to peer out.

VIII.

ROBERT was with them, and was going down over the slope to drag the car from its resting place. Neither Stanton nor the girl could see what was going on, but they could hear the noise of the monster at work. What means it used—whether it picked the car up bodily, or dragged it up the slope as a derrick would have put an overturned

steam engine back on its track—they could only imagine. But in less time than it takes to tell it, the motor car was in the roadway and Braggadore was testing the engine.

"No damage done," he was heard to growl.

Pierce's curiosity would not permit him to remain where he couldn't see, so he crawled on his stomach to the back door where he could get a view of what was going on in the darkness.

He saw the luminous being, using the bumpers as steps, climb to the steel top of the car and lie on its stomach, its great arms spread out over the sides.

From the woodshed Braggadore had brought some cut logs, and these he placed on either side of the huge body to keep it from rolling. With the heavy chain, taken from the scow, he secured the monster by passing the ends through the windows and securing them with a padlock.

Then, with blankets carried by Jeka, he covered the ungainly cargo from head to foot, using ropes for this purpose. The task done, he sprang to the ground, and regarded his handiwork.

"He'll ride safely enough if we go slowly until we gain a smooth highway. Somewhere along the route we can build a crate and hire a truck. The rest will be easy. We'll sail from New York in two days."

"Fine!" exclaimed Jeka. "You'll have to come to the bungalow with me, Louis, and bring the baggage. It's too heavy for me to carry." Together they disappeared in the pines.

Stanton was tingling with suppressed excitement as Lione crawled to his side. "They've handed me everything on a silver platter," he whispered. "Or at least on my car!"

"What do you mean, Pierce?"

"Why, it's as simple as rolling off a log. I'll drive Robert over to the Cobb farm and bury him! Don't you see? Then when Braggadore and Jeka return

with their baggage they'll get the surprise I got when I found my car tossed down the slope."

He grasped the girl by the arm, hurried her out of the camp, forced her into the front seat, and hopped in beside her. He started the engine, but the ton weight on the top made the start difficult in the rutted road. The wheels spun, churning up mud and rocks, but the auto wouldn't budge.

"We can't get away with it," Lione cried, "as long as Braggadore has the disk."

But Stanton persisted. "The friction of rest is greater than the friction of motion," he reminded her between gritting teeth. He pressed on all the power of the engine, and gradually the car began to move. Slowly, cautiously, he edged it along, the incline of the ridge helping the momentum. But it was a breathless moment for the unique kidnapers.

Near the ice house, however, something began to happen. They could feel the monster coming to life. "The disk!" cried the girl apprehensively. "Braggadore is using it! Jump! Jump for your life, Stanton!" Saying which she opened the door on her side and leaped, stumbling and rolling to some distance.

"Damn-the disk!" the scientist swore, jamming the accelerator to the floor. "I'll test the strength of this phony man against modern mechanical perfection!"

But behind him, the chain holding the monster snapped, one end of it cracking him on the head with a bloody blow. Dazed, but still conscious, he continued to pit the power of his engine against the power of the disk.

The disk won. The elemesiumized being was not only loose, it was beginning to crush the steel top in its massive paws. Lione was screaming at Stanton to jump before he was caught in the pincherlike grasp. He did jump, and just in time. The monster had

stepped down to the ground, yanking the car up on its rear end as it did so. Then, as the young scientist lay where he had fallen, staring unbelievably, he saw his heavy car lifted and hurled through the air, to crash against the ice house, which crumpled under the contact.

Howling with ear-splitting rage the monster was wandering around in a circle, its mammoth arms extended, its long fingers clutching the air convulsively, as though searching for the one who had dared to resist it.

AS it started in his direction Stanton took a header down the slope where he thought Lione had gone. But she was not there, and he lay still, his blood pumping in his veins. He thanked the stars that were glowing above that the luminous man could neither see nor hear. But Braggadore had these senses, and the alien was on the scene.

He had caught Lione and was threatening her at the point of a pistol. "You tried to defeat us, damn you! You thought you could get away with Robert. You've been the means of destroying our plans utterly!"

"You meant to kill my brother and me!" she blazed back at him defiantly, and Stanton admired her courage. "He may be dead now, you murderer!"

"A few lives more or less mean nothing to me," the angry one raged. "I put Starrow and that damned spy out of the way, and I'll do the same thing to any one who tries to interfere with me!" He dragged the girl up the ridge, cursing as he did so, while the lumbering monster meekly followed.

The scientist was in a spot. His natural impulse was to rush to the girl's defense. But Braggadore would have killed him without compunction, and a dead man would have been of no service to her. His admiration for her increased as he realized that she had kept his part in the attempted kidnaping

secret. Convinced that he was dead it never occurred to Braggadore that any one else was involved.

Stanton's course was plain. To try to rescue her unarmed was foolish. His only hope was that Gideon had returned with the revolver.

Finding their only chance of getting away before daylight gone, with the smash-up of the car, Braggadore and Jeka might resort to anything. They had to catch the ship that sailed from New York in two days, but their plans certainly did not include taking Lione with them. What they would do about transporting Robert was the problem they were doubtless trying to solve at the moment, and this would give Stanton the time he needed.

Slipping into the water he swam to the opposite shore. To his consternation Gideon was not there. Certainly, he reasoned, there had been ample time for the farmer to reach Wolfton and return. With dire misgivings that something had gone amiss the scientist ran as fast as he could over the abandoned road that led to the Cobb farm. Fervently he hoped he would encounter the farmer on the way. His wish was rewarded. A mile away he came upon Gideon bending over a body in the lane.

"What's this?" he asked, breathlessly.

"I've been working on this fellow for some time," the other replied. "I think he's dead."

Stanton knelt and turned the man over. "It's Lione's brother, Guido Panchette." He felt the other's heart. "He's not dead; just stupefied. Effect of Braggadore's drugged cigarette. Carry him into the Cobb farmhouse and throw water on him till he revives. Did you get the gun?"

"Yes, here it is."

"How about the telegram to Boston? Did you get it off?"

"Yes, but that sleepy operator thought I was crazy when he read it. He took the five bucks, though."

Stanton talked rapidly. "I've no time to lose, Gideon. They've got the girl in the bungalow. I've got to get back." In a few words he told what had happened. "When Guido recovers tell him everything, but try to get him to remain here. Then you get the flat-boat from the camp near the ice house and row out on the lake. Watch for my friends, if they show up, and act as their guide."

At top speed Stanton ran back to the lake. He crossed the dam at the risk of his neck, but he had no thought of danger. His only idea was to get inside the camp on top of the knoll. Hurrying up the ridge through the corridor of pines he found everything as quiet as a graveyard. There was only one possible way of getting into the camp—that was by way of the chimney.

The radiant tower offered means of ascent, and he climbed it with the agility of a monkey. The chimney was of ample construction, spacious enough to permit the insertion of his body. It was not an easy task to lower himself, but by straining his arms and legs, and scraping off plenty of flesh, he succeeded until he reached the opening in the living room.

Here there was nothing to do but drop, and he did so, breathing up a silent prayer that he would make no noise. He landed, ankle-deep, in a bed of burned ashes. And there he stood, holding his breath, covered with soot, until he could get his bearings and accustom his eyes to the dim light that came up through a cellar trap.

He could discern a large table with several chairs around it, and to the left an opening that doubtless led to the kitchen. There were other chairs here and there, and near the right wall a couch. As he stood in the grate he distinctly heard some one breathing, and by straining his eyes he could make out a form on the couch. Making his way

cautiously toward it he discovered Lione, bound wrists and ankles.

IX.

WHISPERING a soft caution he speedily released her, and she sat up, clutching him around the neck with frightened arms.

"There was a fearful scene," she panted in scarcely audible tones.

"Braggadore started after me—I think he intended to kill me—but Jeka tried to interfere. He turned and struck her down, and while she was stunned, he bound me. Then he called Robert and ordered Jeka dragged into the subcellar. I heard her awful screams, and I suppose I fainted. I'm sure she is dead."

Stanton was afraid the girl was going to faint again. "I must get you out of here," he said. "I came down by way of the chimney, but I doubt if I could get you up that way without making a noise."

"The doors and windows are all electrified," Lione informed him. "And the seismograph in the subcellar will reveal your presence if Braggadore notices it."

"How did you and the others go in and out?"

"By way of the large doors against the foundation outside used for Robert. They are opened by secret buttons, inside and out, but I don't know their locations. Guido left the doors open and I ran out that way. When Braggadore dragged me back in, he closed them. I doubt that you could find the buttons, as they are concealed like those that open the trap on the island."

A sudden flood of violet light came from below—a blinding glare more intense than sunlight—shot upward through the trap in the cellar, in a solid ray that made the scientist cover his eyes, and the girl hide her head behind his shoulder.

"Braggadore is coming up from the

AST-9

"forbidden light" chamber," she warned in a frantic whisper.

Stanton pressed her hand protectively. "I can shoot him as he sticks his head above that trap," he said quietly.

"But if you don't kill him instantly," she reminded him fearfully, "he can blow us all to oblivion."

To their horror, the first to put in an appearance in the enveloping ray was the monster, who mounted the iron ladder with the ease of a gorilla. With their eyes more accustomed to the unnatural brilliance the staring pair noted that its great paws were smeared with blood. Stanton gently nudged Lione off the couch, and slipped down beside her in back of it, his fingers gripping the butt of Gideon's revolver.

Braggadore, with a hood over his dark face such as those worn by users of acetylene torches, climbed into the room, and the pillar of light was extinguished, cut off by the subcellar trap. The alien was talking to his hairless companion as though the monster understood his words.

"Jeka wasn't to be trusted anyway, Robert. I think she intended selling me out when we got home. She would have turned the same trick had she been able to do so when she was able to get along without my aid. It served her right. Women are trouble-makers the world over."

He paused as he applied his eye to a small tube in the front wall of the bungalow. "There's a boatman on the lake," he said angrily. "Some yokel must have heard the plane explode, and is out there investigating."

"Well, we'll fix him. We'll get into our own boat, go down there and sink him without a trace. Then I'll hide you in the woods until I can have a crate made to transport you in. We will miss the New York boat, but there is another from Boston in a few days. We can make that."

AST-10

He went over to an old sideboard and poured himself a drink.

"There's one more little job for you to do, Robert, before we take our farewells of this damned spot. Your beautiful young relative has become obnoxious to me, but I shall permit you to bestow a lingering embrace upon her before we go. I'll toast your caress as 'the embrace of death.'" He downed half the liquor and then laughed cruelly. "The embrace of death! That will be a fitting end to the last of the Panchettes!"

AS he turned toward the couch he noticed, through the dim light, that it was empty. With an oath he stepped toward it, then stopped short as the unfinished glass dropped to the floor with a crash.

Stanton stood before him, gun in hand. "If you move an inch, Braggadore, I'll kill you with as little compunction as you killed Starrow and Jeka!"

The big alien remained immovable. The spy he thought was dead resembled a black ghost.

"Put your hands above your head," the scientist commanded in steely tones, and the other slowly raised his arms as ordered.

Lione stood up quickly. "We must get the disk away from him!" she cried excitedly, and before Stanton could prevent she had leaped over the couch to search the foreigner.

"Wait!" shouted her companion; but it was too late.

Braggadore had seized the girl; and now held her as a shield. "Go on and shoot!" he sneered triumphantly, whipping out his own weapon as he spoke and firing point-blank. But Lione jostled his arm and the bullet went into the ceiling. As Stanton ducked to one side, Braggadore got the disk and spoke into it, and before the scientist realized exactly what had happened, he felt his shoulder seized from behind in the crushing paw of the monster.

With its other hand it reached down for his legs, grasped them and began bending him backward. The sweat poured from him as he struggled to free himself from those viselike grips, but he was as helpless as a small bug under a man's heel.

Lione, however, was giving the big man more of a tussle than he could handle. She had turned into a human wild cat. With nails and teeth she was fighting heroically, not only for her own life but that of her only protector as well. She had caught Braggadore's gun hand in her clawing fingers, and sunk her teeth into his wrist.

Cursing with pain, the alien sought to throw her off, and in doing so dropped his revolver. She caught it up and would have killed him had he not lunged forward and smothered her with his arms. This time he had to use both hands, and in doing so he accidentally dropped the disk.

The human contact removed, the monster automatically released his hold on Stanton and the scientist sank to the floor where he lay. Lione's cries, however, as Braggadore sought to strangle her, brought his strength back, and with the fury of an enraged panther he leaped at the other man's throat.

It was a unique fight. All three went down in a flailing mass, the girl between the two men. Stanton hammered blow after blow into Braggadore's face, until it was a bleeding pulp. But his antagonist was fighting as strenuously, and more cunningly. Lione had slipped from between the battlers as the foreigner, locating his weapon, brought it against Pierce's breast and fired.

The girl screamed. She had found Stanton's revolver and was now seeking an opening to kill the giant.

"Don't shoot!" Stanton gasped. "I've killed him, I think! At least I've strangled him into unconsciousness!"

Lione was bending down close, and running her hand over the scientist's

chest. "You're shot!" she cried. "You're bleeding! Let me kill him!"

"No," Stanton commanded. "He deserves a worse death than shooting." He got to his feet. "We'll bind him with the ropes he used on you—just to make sure of him!" Saying which he quickly secured the wrists and ankles of the prone man.

Lione had torn off part of her dress, and now insisted upon binding up Stanton's wound. "It's nothing," he said. "Luckily he couldn't get the right angle for firing."

"I thought he had killed you, Pierce," the girl wailed hysterically, as her nervous fingers tied the knots of the bandages, "and I was determined to end his life!"

"And I almost lost my reason, Lione dear," he replied, patting her shoulder appreciatively, "while you were in that fellow's grasp, and Robert was trying to tie me in a knot."

"It was a close call for both of us," she said, her task finished. "But we must find the disk." Try as they would, however, they could not locate the powerful little instrument. "It must have rolled down a hole," Stanton concluded.

BRAGGADORE began to stir. He rolled over on his back and opened his eyes. Finding himself bound, he tried with all his strength to break the rope, but failed. Finally, staring at Stanton and Lione with bloody eyes, he spoke. "What are we waiting for?" he demanded.

The scientist grinned grimly. "There's no particular hurry now, is there?" he asked. He was revolving the situation in his mind. Although Braggadore was secure, and the monster was harmless, knowledge of how to get out of the trap was still lacking. His hope lay in the arrival of his friends in their planes, if the telegram had succeeded in locating them.

"Prop me against the wall," Braggadore growled. "I want to talk to you."

"I guess you're safer where you are," Stanton said calmly. "If you have anything to say, I'll listen."

The bound man thought a moment. "How much would it be worth to you to go off about your business, and take the girl with you? I have millions at my command."

Pierce smiled contemptuously. "A scientist cannot be bribed. You are going to the electric chair for the murders of Starrow and Jeka."

"Both deaths were accidents," the other protested savagely.

"Well, I'm here to see that no more such accidents occur, if I can help it, Braggadore."

"If you will permit me to go, I can return to my own country. I can give you anything you ask."

"Sounds romantic," Stanton returned, "but I'm not interested. I've decided that the Panchette secret shall remain in this country."

Braggadore snarled. "Only two people knew that secret, and Guido Panchette is dead."

"I have reason to suspect he is not dead, so that's one murder off your conscience."

While bandying words with the alien, Stanton's thoughts were on something else. He had an overwhelming desire to go down into the subcellar and inspect the "forbidden light" apparatus. He could use Braggadore's hood and see for himself the nature and construction of the instruments that created such terrifying power. But when he suggested to Lione that she remain and guard the prisoner, she demurred.

"Braggadore is so treacherous that I wouldn't remain with him a moment under any circumstances. If you must go down, I'll go with you. That's the only way out, through the tunnel to the island, unless we can locate the buttons that open the cellar doors."

"We could cut the electric current from the windows and doors, couldn't we?" Stanton asked.

"I wouldn't know what switches to use, and we might blow ourselves up, Pierce. I've never been here except with my brother."

Braggadore laughed harshly. "Neither of you can get out of here without my aid. Even if you got into the subcellar you couldn't open the tunnel door. It's made of steel."

It was so hot in the living room that perspiration was rolling off the three occupants. The only air seemed to come through the chimney. Stanton began to consider some means of getting Lione out through that difficult passage, for her safety was uppermost in his mind. As he was pondering the possibilities he was dumfounded to hear the monster, who had stood in one corner all this time, howl his death cry.

"Braggadore has tricked us!" Lione screamed. "He has the disk!" She ran behind the table to protect herself as Robert began to move around the room.

"I haven't got it!" the bound one yelled above the din. "Release me, or we will all be destroyed!"

"Don't release him," the girl implored Stanton, who had leaped into the fireplace. "He will make Robert kill us both!"

The monster trampled over chairs, passed the fireplace as Stanton squeezed his body into the recess. It made its way toward the writhing Braggadore, who was exerting superhuman strength to release himself. At last he burst the bonds around his wrists, and attempted to pitch himself down the trap opening. But he missed, and Robert had him.

X.

FROM THE TRAP appeared an unexpected arrival. Guido Panchette, hoodless, and with hands groping in the

dim light of the living room, startled all by his presence. "Guido!" cried Lione, rushing to her brother and throwing her arms around his neck. "Guido! You are safe!"

"Thank Heaven you are all right, sister," the inventor said feelingly, embracing her tightly. "I entered the subcellar without a hood and am temporarily blinded, but it will pass."

"How did you get back, dear?"

"A man named Gideon found me in the woods where I had wandered, stupefied as the result of Braggadore's drug. This chap brought me to my senses and told me something of what had happened. He mentioned a friend named Stanton. He told me to stay where I was, but I was concerned about you. So I swam to the island, and entered through the tunnel. In the subcellar I found a murdered woman, and I thought it was you, Lione. I also found the actinic disk, that had been drawn back to the accelerators by magnetism. I thought Braggadore and Jeka had killed you, and I sent Robert to destroy them. I can see more clearly now."

"This is Mr. Stanton, brother. I owe him my life."

"I'm deeply grateful to you, sir," the scientist said, grasping Pierce's hand. Meanwhile, Braggadore was mingling his cries of pain with the howls of the monster.

"That's all right," Stanton retorted sharply, "but you must release this man instantly, Panchette."

"This traitor deserves to die, sir. He would have killed us all to get away with my secrets."

There was a moment of tense silence. Robert had ceased to howl, and Braggadore hung limply in the monster's hands.

"I have a gun here," Stanton said finally, grimly. "If you don't release Braggadore I'll be compelled to shoot you."

At this threat Lione spoke, and with

equal grimness. "If you shoot my brother, I'll shoot you, sir!" She had Braggadore's revolver, and held it menacingly, although her hand trembled.

Stanton sought to temporize. "You don't want to see this man killed before our eyes, do you, Lione, no matter how bad he may be. The law will take care of him."

"He tried to kill you!" she blazed back. "He tried to kill me! He tried to kill my brother! And he did kill Jeka and Starrow!"

"But that's no reason why we should stand here and see another murder!"

Guido spoke. "I'll risk death for knowledge any day, sir!" Then he whispered into the disk. Robert started to twist Braggadore's limbs.

Stanton hesitated a moment, then fired, the bullet piercing Panchette's forearm. He was sure Panchette was mentally unbalanced. Lione did not fire. She stood there with her gun clutched in impotent fingers. Evidently her concern for him was greater than her concern for her brother, but the ordeal for her was a frightful one.

THE SHOT sent Panchette into a rage. Snarling, he hurled himself on Stanton with a sudden ferocity that caught the younger man unprepared. They went down, fighting furiously.

"You fool!" shouted Guido like a madman. "Do you think you can stop a Panchette? Do you think we have worked a hundred and fifty years only to suffer interference? We've sacrificed our lives to our work, and I'll sacrifice mine!"

He was stronger than Stanton had realized, and the scientist had to struggle hard to subdue him, as Lione screamed at them.

"Get him out of here, Pierce! Get him out before Braggadore regains consciousness and finds the disk!" She herself was searching for the tiny instrument.

The two men rolled around the floor, bumping against the legs of the inanimate monster who had dropped Braggadore's limp form from its grasp. They toppled down the open trap into the cellar, still battling with each other. Lione climbed down after them, screaming hysterically. The fall hurt the weakened Panchette more than it did Stanton, and the scientist was finally able to get to his feet while pinioning the other's arms.

"Guido!" pleaded the girl. "You know where the buttons are! Let us out through the cellar doors!"

"I'll not let you out!" her brother yelled unreasonably. "Braggadore is still alive, and he has my secret. I'll not let him live!"

"Listen!" broke in Stanton. "Airplanes! My telegram has been answered!"

"What telegram? What airplanes?" demanded Panchette excitedly.

"I wired friends of mine in Boston for aid. They have arrived. Gideon is guiding them to the island. If you will let us out, we will have Braggadore, and your secret will be safe!"

To his amazement, however, the man flew into a new fit of rage. "Damn you and your friends!" he shouted with blazing eyes. "I'll cause a storm that will defeat you all! I am not ready to reveal the Panchette secret to an ignorant world!"

He tore free from Stanton's grip, and by manipulating some concealed switch, caused the subcellar trap to open. The blinding light compelled the trio to blind their eyes from its burning glare.

Stanton was about to seize the crazed man again when the death cries of the monster, as it began lowering itself into the cellar, brought a crisis. "Braggadore has found the disk!" Lione gasped helplessly. "He is setting Robert on us! There is no time to use the cellar doors!"

The impending danger made her

brother more rational. "Rip off your shirt, Stanton," he said jerkily, "and wrap it around Lione's head. Close your eyes, and she will lead you. I can neutralize the actinic disk."

He was gone; down through the trap, and as quickly as he could Stanton had his shirt off and wrapped around the girl's head and face. He urged her to descend, but she clung to his hand and dragged him after her, just as the howling monster gained the cellar floor.

Guido was calling to them. "The button that releases the tunnel door is under the small shelf on the wall to the right of the door. Get my sister out, and I'll look after myself."

The heat of the living room and the upper cellar was as a cooling breeze compared with the blast that surrounded them as they moved cautiously through the "forbidden light" chamber. It was like thrusting themselves into the fire of a furnace, and Stanton felt his flesh scorching.

Lione, who had been there before, knew her way about, and despite the shirt on her head, led the scientist safely past blistering apparatus, the structure of which he had no way of determining, for he dared touch nothing. The girl's fingers clutched his as in a vise, but by the time the solid door leading to the tunnel was reached, her strength had failed, and she sank to the floor.

Groping, Stanton picked her up. Holding her in one arm, he ran the fingers of the other over the rough wall on the right of the door. He located the shelf and pressed the button underneath. The heavy portal swung open, and he dragged Lione into the tunnel. Here, it was cooler, though pitch-dark when the door swung slowly shut again, and when Stanton opened his eyes he could see no more than he had inside the inferno.

Outside he could hear the crackling of lightning and the roll of thunder. He was sure Panchette was mad, for

this attempt to screen the lake from the planes might cut off their only hope of rescue. The whirl of the airplanes had become indistinct.

Recovering, Lione began pleading frantically to save her brother. "He is terribly unnerved, Pierce! And he isn't strong. Braggadore will kill him!"

WHAT was happening inside the starlight chamber there was no way of knowing, as the steel door cut off all sound from that direction. Stanton would willingly have gone back had he been able to open the door. But he couldn't budge it. He placed his revolver near where he thought the bolt might be, and pulled the trigger, but the gun was empty.

"If Guido can neutralize the disk, and keep control of Robert, he has the advantage, Lione."

"But if Braggadore avoids Robert, and reaches Guido, he can overcome him. He has a hood; Guido hasn't. He may even now be killing my brother while we stand here doing nothing!"

She was unreasonable in her criticism, but Stanton couldn't blame her. He had come to the end of his resources, and realized that they were penned in helplessly between two locked doors like rats in a trap.

"Wait!" he said suddenly. He ran through the tunnel to the island end. He found the stairs leading to the horizontal door, but, although he placed his back under it and heaved with all his strength, he could not move it. It was made of a solid sheet of steel, whose hinges were embedded in concrete.

Panting from his exertions, he thought he heard some one above on the island. Finding a rock, he beat against the panel, and called out. "Who is it?"

A voice came back. "It's I, Gideon!"

"For Heaven's sake, try to pry this trap open!" Stanton cried.

"I've been trying to get it open," the farmer said, "but I can't budge it!"

"Where are the planes, Gideon?"

"They circled overhead, but this storm broke loose, and they went off to the north."

"If they come back, get my friends to bomb this door. Lione and I are caught in this tunnel." There came the sound of a frightful lightning crash. "What was that, Gideon?"

After a moment's silence the farmer answered. "One of the planes was coming down through the clouds. A bolt of lightning struck it. It's doing a tail spin into the lake!"

"Get to it as fast as you can, Gideon, and save those fliers!"

He ran back through the tunnel and found Lione crouched against the steel door. "I can't hear a thing," she moaned pitifully. "I'm sure my brother is dead."

Stanton lifted her up and attempted to reassure her. She clung to him, sobbing as though her heart would break. What was occurring inside the chamber he hardly dared imagine. Knowing Braggadore's strength and treachery he, too, feared for the life of Panchette.

As they stood there in tragic uncertainty, they were suddenly crushed back against the wall of the tunnel by the unexpected opening of the steel door. The monster came forth, his hands wet with blood. Lione gasped, "I knew it!" and buried her face in Stanton's shoulder.

He whispered to her, as though the glowing thing might overhear. "If Robert continues to function, it means that one of the men is still alive," he said.

But she could not be calmed. "Guido is dead. I know it. I feel it."

"Listen, dear," he replied, talking rapidly, as he held the door open. "It's possible Guido is still alive. I'd go back in there, if I dared leave you."

"You have no hood. You'd be

burned to death. Or Braggadore would kill you."

"Look!" he commanded her sternly. "Robert is about to let himself out onto the island. It's your only chance to escape. Do you think you could slip out after him, while the trap is open?"

"But what about you, Pierce?"

"My friends will get me out, I'm sure. If Braggadore is still alive, he may come out this way, and I want to be free to handle him alone. Go! Go, while Robert has the trap open!" He forced her ahead, and she ran down the tunnel.

Without considering the risk of Braggadore being alive, and hooded, while he, himself, would have to grope in the blinding light of the inferno, Stanton plunged back in. He moved as cautiously as he could, not knowing at what moment he would encounter some death-dealing piece of apparatus.

He had visions of a condemned criminal sitting in the electric chair, while the hood and lethal electrodes were being adjusted. His brain was on fire and his eyes smarted in their sockets.

XI.

THE CHAMBER was circular, the "forbidden light" apparatus occupying the center of it. A three-foot area seemed to circle the heat units. By keeping one hand against the wall, which was hot to the touch, Stanton progressed slowly. Halfway around his foot came in contact with a yielding thing, and he knelt down.

It was a man's body, judging by the clothing, and was a bloody, misshapen mass. The scientist recoiled, unable to determine whether it was Guido or Braggadore. He stepped over the corpse, continued his search, and when he had regained the steel door he was not much wiser than when he had entered. One of them had been killed by Robert, but which one?

As he thought of Lione attempting to slip out of the tunnel after the monster, his blood chilled despite the heat of the inferno. The door had closed automatically, but he was able to open it readily with the aid of the button under the shelf. In the tunnel he filled his stifled lungs with the cooler air.

Quickly traversing the passage, he found it empty. Lione had escaped, and he breathed up a prayer of thanks. But how he was to get out was the problem that now confronted him. He mounted the stairs and again placed his back under the trap. As he did so, something exploded in his face, and he tumbled back to the floor of the tunnel, stunned.

When he recovered, he was lying among the trees on the island. Three men were bending over him. One of them was Gideon.

"Hello, Stan!" cried one of the others. "Are you all right?"

"Dick!" he exclaimed with relief. "And Gray!" His two friends yanked him to his feet, and slapped him on the back. "Our ship is a wreck," the first speaker explained, "but we saved that stick of dynamite to blast the tunnel open. Our tools all went into the lake, however."

Stanton was not paying much attention to their explanations. "Where is the girl?" he demanded anxiously. Then he felt his pulses stop beating. Gideon was pointing waterward.

"When I got to the ship, and took your friends off," he said, "we headed for the island. As we got near, that trap popped open, and the monster came out. Then the next thing we knew, the girl came out of the hole in the ground. She was about to head for the water, when that guy that potted at you on the plane appeared in front of the camp on the mainland. The monster turned, grabbed the girl, and dragged her to that tub of a boat of his."

"We took a couple of shots at it," Gray offered, "but it did no good."

Stanton was tearing his hair. "We can't stand here and do nothing!" he cried. "That was Braggadore on the mainland. He's using Lione to cloak his get-away!"

"You know more about it than we do, Stan. Tell us what to do," Dick said. Then added: "We've got two more planes, piloted by McCall and Meighan. There they are now, coming down."

Stanton ran for Gideon's flatboat. "Come on," he yelled. "Our only hope is to sink the tub with a plane, if we can. We can't shoot or bomb it for fear of hitting Lione. That is," he added, with a catch in his throat, "if she is not already dead." Stanton was at the oars, rowing frantically.

"She's not dead," said Gideon, who was standing in the bow. "She's lying in the bottom of the scow. The monster must be holding her with his foot. I can see her hand, beckoning to us."

"Look!" whispered Gray. "Who's that duck on the right shore there, among the trees?"

"That's Braggadore," Stanton said.

"I could pot him," Dick exclaimed, raising his automatic.

"Don't shoot, Dick! He has the means of blowing us all up!"

THE PLANES, piloted by McCall and Meighan, had churned to a landing on the lake, and were circling the monstrous oarsman, trying to get some instructions from the men in the small boat.

Before realizing what had happened, however, the Elemesium Man had changed his course and accelerated his speed until he was cutting through the water like a torpedo. He made straight for the nearest plane, and McCall hadn't the time to maneuver out of the way. The big tub crashed against his pontoons, ripped them off, turning the

plane upside down in the water, as the pilot leaped and began to swim for his life.

"Hell!" Dick shouted. "That's two ships gone! The damn thing has the power of a submarine!"

Stanton recklessly rowed after the monster, with no thought of what he would do if he caught up with it. It would be the same as trying to grasp hold of a runaway railroad engine. But Lione's plight drove him on against desperate odds. Then he suddenly tried to back water, for the four men in the smaller craft had become the pursued.

The scientist's strokes were feeble compared with those of the pursuer, who bore down at an astonishing rate. Seeing the inevitable, Gideon took a header into the water, and began to swim for shore. Stanton, unwilling to risk his friends' lives, ordered them to do likewise, and they went overboard.

He was left alone, but not for long. The tub overtook and sank his craft like an eggshell. As it passed, however, the desperate youth lurched forward, and clutched the wide stern of the scow. Hanging on, he climbed aboard and rested momentarily, staring into the unseeing eyes of the unnatural oarsman.

Lione was pinned to the bottom, held securely by the monster's foot. She was weak from her futile efforts to free herself.

"Are you injured, dear?" Stanton asked, clasping her hands.

"No," she answered. "Robert hasn't hurt me, but he is holding me so I can't move. Go away, darling, and save yourself while there is time."

Meighan, seeing what had happened to McCall's plane, was jockeying at a safer distance, wondering what to do. Dick and Gray had swum to his ship, and climbed onto a pontoon, while Gideon and McCall continued to swim shoreward.

Braggadone, among the trees, was evidently enjoying the plight of his vic-

tim. He probably imagined himself an admiral directing a naval engagement. Now he tried a new trick.

He caused the monster to drop its oars and reach for Stanton. Quick as a flash, the scientist went overboard, but still held to the gunwale of the scow. With a thrill of exultation he saw Robert raise his foot to move toward the stern for his would-be victim. Exerting all his strength Stanton reached in, grasped the girl and yanked her into the water.

The men on the plane yelled, and McCall opened his throttle wide, making his engine roar. The plane ripped through the water to get between the swimmers and the tub, but in doing so the wash of the pontoons nearly drowned Stanton and the girl. Crouching low on the right pontoon, Dick and Gray seized the scientist and his precious companion and dragged them along.

The monster, however, was being expertly directed by Braggadore. Its vise-like paws caught the left pontoon and held on, while the pilot, sensing the situation, sought to turn his ship into the wind. It was another Titanic struggle such as the Elemesium Man had waged against Stanton's motor car.

Taking advantage of this diversion, the scientist and Lione, who had recovered her strength, started swimming for the island. The giant on the shore, however, was not to be so easily outwitted, and the swimmers soon found themselves being pursued. The energized being was cutting through the water with the ease of an oversized walrus. Meighan made another effort to come between, but with one pontoon twisted, he had all he could do to keep his plane from capsizing.

Suddenly Lione threw one arm over Stanton's shoulder. "I'm exhausted, darling," she cried. "But I want you to get away!"

Stanton held her up, struggling to

remain afloat. But her weight pulled him down, and they went under together. Hardly aware of it, he found his feet on bottom, and when he straightened, he could bring his head above water. Holding her, he stumbled ashore, dragging her to firm ground.

"We can keep away from Robert for the time being," he panted. "He'll have to uproot every tree to get us. By that time the boys may be able to get us off."

BUT by that time the monster was also on the island, crushing everything in its way, and emitting deafening howls of rage. Like the alien on the shore, the elemesiumized being seemed to have gone mad with lust of destruction.

Trees were uprooted, and great boulders hurled through the air, until the island was a shambles. Stanton and Lione sought refuge behind the last remaining clump of pines.

As the monster approached this barricade, the plane succeeded in nearing the island, and in a last desperate effort to escape, Stanton and the girl rushed into the water, and gained the pontoons. Dick and Gray grasped them, as Meighan turned the ship to try to get off the surface of the lake.

At that instant a terrifying upheaval occurred. Compared to it a dynamite blast was as a smashed paper bag. It was as though a subterranean mine had let loose, to blow everything above to pieces.

The island was submerged, and on the mainland, the camp, and everything in it, shot skyward, scattering debris through the clouds. The raging storm seemed to meet the released elemesium, and lightning bolts were shattered into great flames that seared the heavens.

A mountain of water was lifted from the lake, to fall back again and flood the countryside, as with a tidal wave of

unprecedented size and violence. The airship was caught in the vortex, lifted and spun like a top, and sent crashing into the forest on the right shore. By some miraculous intervention its occupants were not killed outright, but, dazed and bleeding, were able to extricate themselves and help each other to the ground before the plane caught fire and was consumed.

Carrying the girl, who was badly injured, the men made their way to the spot where Braggadore had been. They found McCall and Gideon on their hands and knees, crawling away from the water's edge.

"We got him," gasped the farmer, "but he damn near got us, too. We got as close to him as we could before he heard us. He turned, and McCall fired. He dropped the disk, and we jumped him. He had the strength of ten men, and he got the disk again before we could prevent it. He yelled something into it, and the next thing we knew we were in the air, and then the water."

"What became of Braggadore?" asked Stanton, who was kneeling on the ground, holding Lione in his arms tenderly.

"Don't know," answered McCall, wiping blood out of his eyes. "When that earthquake struck, or whatever it was, we were too busy looking after ourselves to notice anything else."

OVERNIGHT Lonesome Lake became the most popular spot in the countryside. Crowds swarmed to the scene, to mingle with reporters and cameramen. They wanted to see for themselves some of the details of the unbelievable story that flared in the headlines.

Washington was quick to surround the spot of destruction with a troop of regular soldiers, while investigators and scientists rushed there to salvage every scrap of evidence they could lay hands on.

In the sunken foreign plane parts of the folio and its charred papers were found, but there was no trace of the ice-cold skin similar to that in Gideon's garage. This clue was also missing, but it had left tangible proof of its existence behind. Fragments of the tin box were found in the walls and ceiling of the shattered shop.

Stanton prepared two reports, one of which was called for by the government. The other was submitted to the two States that had offered the reward of \$1,000 for the solution of old man Starrow's strange death. This reward, the scientist pointed out, should go in its entirety to Gideon, and in due time the young farmer was proudly exhibiting the check.

Lione Panchette recovered from her injuries, but did not surrender her brother's papers which were kept in a safe in their New York apartment. She turned these over to Stanton.

The airship line that had furnished the three planes which were lost in the battle with the Elemesium Man was reimbursed by the government.

A year or so after these episodes, Lione Panchette smilingly called Pierce Stanton's attention to a newspaper article which set forth, at some length, the fact that scientists of a certain foundation had actually constructed an apparatus with which to keep alive indefinitely tissues and organs of human being and animals, and accelerate their growth with the aid of a new element.

"They are only a hundred and fifty years behind the times, dear," Stanton said with an amused chuckle, "but if they have re-discovered elemesium, what's a century and a half, eh?"

Although the lake was thoroughly dragged, and descriptions were broadcast throughout the land, no trace was ever found of the monster or Braggadore. Robert's destruction must have been caused by his own reaction to the agitation of the disk.



Call for Kelly!

Dear Editor:

The September issue was an all-star number right enough, and if you can keep that pace during your third year, you will certainly add fifty per cent to your circulation. Donald Wandrei seems to have recaptured some of that inimitable style that made *Colossus* so famous; if he stays that way, we will welcome more of his stories in the magazine. C. L. Moore merits congratulations also; her stories are always different.

While I am at it, I will cast my vote for more full-page illustrations. Elliott Dold is too good an artist to be limited by half-page pictures. His double-page pictures are all right, but let's give him and Marchioni full pages to do their work on.

It has been a long time since we have had a story by Frank K. Kelly. His vivid style is always appreciated, so let's keep Kelly in hot water until he favors us again. Try some third-degree methods if you have to, but get him to write another yarn if it's at all possible.

Special Bulletin: I have discovered that Bob Tucker's oriental pal, Hoy Ping Pong, who was chased over the Shanghai by an irate editor, is trying to sneak back into the United States—secretly aided by the dictator. Tucker has bought a fishing boat and is trying to get the man into San Francisco disguised as a salmon.

Hoy is trying to smuggle some inferior Chinese chicle into New York to be used for binding Astounding; we've got to hold out on nothing less than genuine tutti-frutti! I would advise brother Ackerman to keep his eye peeled to nip this plot in the bud.—L. P. Wakefield, 2832 Marshall Way, Sacramento, California.

Thank You!

Dear Editor:

Is it safe for a lady—young and friendly—to venture into your roaring madhouse of males? For two years now I've chuckled in my corner over the letters in *Brass Tacks*; the praises; the complaints; the inanities of Bob Tucker; and the wise-eyed Kaletsky-van Kampen war this year!

What care I if the odds are uneven, if this lad doesn't like Brown's cover paintings, or if

that lad raves about Dold or if Kaletsky and van Kampen tear one another's whiskers off? All this leaves me cold if only I can get to the news stand the third Wednesday of each month and creep back home with my precious parcel under my arm.

Like our editor, I've stood aside looking in, but now I am coming in to see if all goes well on the inside. First, I find that somebody calling himself D-456 is giving my favorite nutty dictator all kinds of go-away! Shame on D-456! I wonder, would the dictator like the dictatress who is guaranteed to be as nutty as he is?

I also witnessed the "going out" of the Lowndes lad, who swooned all over the place because Brown's paintings don't suit him, and because our editor doesn't choose to answer the ravings of his sheep. Such trifles! All these things are so small really, that I wonder why they complain. The stories are the thing and they are usually splendid.

For a superb magazine, thanks to you.

Please, dear editor, I should like to send out through *Brass Tacks* a call to an old friend. I should like to know what has happened to Charles F. Noad, 36 Gibson Gardens, London, N 16, England? I should like to correspond with some young men and women in England and would prefer them twenty-five years of age, if I may be so bold. To you, dear stubborn, but busy editor, I wish everything nice, and to Astounding I give my staunchest support.—Mildred Gifford, 240 West 4th Street, Mansfield, Ohio.

Will Scientific-Fiction Go Poetic?

Dear Editor:

Now children, it's time for you to put up your SPWSSTFM, IAOPUMMFSTFUSA, METROSEFL, SPWSSEFMWIOFPOTUOHT, IPTCOSTFPITQNOPPAF, and all your other play-purtries. I know you're trying to learn your letters but it's best not to study too hard on them at first. Get your little kiddy cars out and we'll go for a ride and then go to nappy's house when we get back. Learning your ABC's is a very interesting pastime but you know we mustn't work too hard.

Now if it's safe to leave the infants for awhile, I'll get on with my letter.

I'm very glad to see that we have another

yarn by John Russell Fearn for the Sept. issue. I haven't finished it yet, but it is swell so far. Most of his are for that matter; please get more of them soon. I notice that he has the distance to Alpha Centauri as being 25 billion miles instead of 25 trillion but that is a minor error, probably due to carelessness, as I'm sure he knows better. However, as I said, that is a very minor error and doesn't at all spoil *The Blue Infinity* as a story.

Astounding is coming right along; the September issue looks to be the best this year and that's saying something.

Say, whatever happened to your plans for *The Planeteer*, and a semimonthly *Astounding*? The cover says you now have the largest circulation of any science-fiction magazine but still I don't see anything of the improvements I just mentioned.

And here's another suggestion: you often have blank spaces at the end of stories that you fill with some illustration or something. How about having a few poems? If nothing else they could be used to fill up space, but I'm sure that many persons besides myself like science-fiction poems. How about it? Will you give it a try?

I certainly second the motion for stories by Clark, Ashton Smith and Keller. Also by Bates if you can get any from him that are half as good as *Alas, All Thinking*. That was a real story.

Well, I've been a good boy and not messed up Brass Tacks for about a year now, but the SPWSSITM and kindred nonsense got me all riled up. And then, too, I wanted to ask for some poetry. I'll try and be good for another year or so now. If you don't I'm going to be very strongly tempted to quit *Astounding*.—Lionel Dilbeck. 1834 Gold Street, Wichita, Kansas.

He Likes It Any Way!

Dear Editor:

To you and the readers this is just another letter, but to me it is something of a climax. In this letter are my ideas about science-fiction, *Astounding* Stories and all the people who read it. I am an ardent science-fiction fan, so much so, in fact, that as long as a story is science-fiction, I'll like it no matter who writes it, how it is written, or what it is about. I wonder how many other fans are like that!

Science-fiction should be just what the name implies—fiction supplemented by science, but primarily fiction. The old blood-and-thunder type of story was very good reading. Why can't we have at least one of the Hawk Carse type of story in each issue? The thought-variant fans get what they want every month, so why can't we have a novelette of the adventure type, too?

If some amateur scientist tells me to subscribe to an adventure magazine, I gently inform him of a few good physics and chemistry textbooks he can peruse as his share of science-fiction.

Now for *Astounding* Stories itself: Naturally, you can improve. With an editor who is willing to take readers' suggestions, and readers who are ready to give them, any magazine should forge ahead.

The metamorphosis of your magazine was from a two-serial, four-complete-story dud into a one-two-part serial such as *Islands of the Sun*. You don't have to wait months for the end of a story. All this about staples and rough edges is crazy. As many a Brass Tacker has said before me, "If *Astounding* Stories was printed on oil-cloth in Chinese it would still be the same *Astounding*, and I'd learn Chinese just to read it."

The only thing missing in your magazine is Ray Cummings, who seems to be ostracized by the other readers from the ranks of your authors. I wonder why.

The people who read *Astounding* must be a pretty good lot on the whole. From their letters in Brass Tacks they seem to me a very intelligent crowd, and I am proud to be classed among them. Although I read the comparatively new type of science-fiction story primarily for enjoyment, I have learned many things from it.

I notice also that about 40% of your readers are between the ages of 12 and 18. Please remember this when choosing your stories—make the fiction good.

Why can't you put science-fiction on the radio? A good weekly story of about half an hour would be grand. Think it over. I wonder, too, what the readers think?—Raymond Van Houten, 26 Seeley St., Paterson, New Jersey.

Did You Say Diffin?

Dear Editor:

Just a word to compliment you on your remarkable progress with *Astounding* Stories, and a request that you keep on getting even better.

I hardly ever miss an issue of the magazine, but I will never become a subscriber until I see good old Hawk Carse and John Hanson back on your pages. Also, I wish you could get C. W. Diffin and R. F. Starzl to give us a few stories. According to your theory, the John Hanson and Hawk Carse stories were too much blood and thunder and not enough science. Well, if you will look over the September and October issues of *Astounding*, you will find the following:

Sky Rock: about as much science as Mother Goose Nursery Rhymes.

The Lady of the Moon: ditto.

Greater Glories: a fine story, but not much science.

The Blue Infinity: The author could not work out a reasonable means of transporting the Earth hither and yon, so he invents an absurd mess of de-etherizers, rods of force, Solar-Projectors, Gravity-Triplers, and other junk, all nice and handy whenever an emergency arises. If there is any science in that story, I'd like somebody to point it out.

The Planet of Doubt—also the other "Ham" and "Pat" tales—were very interesting stories but they are, in my estimation, on a par with the John Hanson stories. Each series, I believe, is even as far as science is concerned.

W62 to Mercury and *A Princess of Pallis*: The same applies to these two stories.

There may be some good reason why you cannot get S. P. Wright to contribute. If there is, why not say so and banish my belief that you are just plain stubborn in refusing what so many have asked for.

Except for this, I have no fault to find with *Astounding* Stories. I know for a fact that it stands supreme in its field. A few years ago, whenever I was at a news stand, I would buy three magazines—all science-fiction. Now, I never read the other two unless I can borrow an old copy. I do not believe in paying money for four or possibly five stories when I can get eight to ten in *Astounding* for the same price.

I really do not think that the highly praised *Twelve Eighty-seven* belonged in your pages. It was a fine story but much more suitable for a semiscientific detective-story magazine.

Incidentally, here is a question: Why is it that, in pictures viewing the Earth from a space ship or other planet, we are always shown the Western Hemisphere, and that right side up?

How about publishing *Astounding* in Canada to give fellows like me a break? Here is my list of the four-star stories in recent issues: *Islands of the Sun*, *Derelect*, *Intra-Planetary*, *Man of Iron*, *Son of Old Faithful*, *The Lotus Eaters*.—J. J. Johnston, Mowbray, Manitoba, Canada.

You Might Read Slowly!

Dear Editor:

The only thing I find wrong with *Astounding* is that it doesn't come out often enough—and when it does, it doesn't last long enough. However, I don't like the idea of jeopardizing its reputation by bringing it out twice a month. Frequency takes the edge off things, you know.

Howard V. Brown, bless his heart, really got science and art at the same time on the October

cover—no blaring backgrounds, no red space or improbable creatures.

The artist that illustrated O'Leary's first cover, showing his new rocket ship, was the best I have ever seen. He would be a great possibility if Brown ever absconds, and also Leo Morey—he is tops.

Intra-Planetary started out screwy, and I thought for sure that at last here was something really different in science-fiction, until the badly thing turned into another blood-stream story. But what an idea: germs getting organized. Well—that was new.

About the nearest you ever came to slipping was in getting conglomerations of all the best authors, and not including David H. Keller among the bunch. You know and I know that he ranks almost, if not, on top. You never read, and I never read, a better story than *Life Everlasting*.

But keep going. Hell, you oughta be able to, walking off with the biggest circulation. I guess circulation means progress for a magazine—at least I hope it does for *Astounding*.—Lewis F. Torrance, 1115 Fifth Ave., Winfield, Kansas.

This and That.

Dear Editor:

Impressions of the October *Astounding*:

Cover: Very good. In the proper light the colors are quite striking.

Night: Cesar Franck's Symphony in D Minor. How can readers write flippant letters after reading a story like that? I was right when I chose my favorite author in the SFL test.

Derelict: A sequel, or perhaps a series, is intended, I suppose.

Intra-Planetary: Although I got the idea at the very beginning, it seems as if the artist didn't get it at all.

A Princess of Pallas: I used to spell it Pallas. It ought to satisfy those who have been screaming for blood-and-thunder stories. I don't care for it much—even Hawk Carse had some scientific ideas.

The Planet of Doubt: Title reminds me of Clark Ashton Smith's *Dimension of Chance*. Foggy worlds seem to be the rage lately. There's not much behind the story—below Weinbaum's usual standard.

Faceted Eyes: Why don't authors get at least three new ideas before writing a story?

Phantom Star: Have you forgotten *The Star That Misbehaved* so soon? The scientific idea seems wrong to me, anyway.

The Way of the Earth: Warriors of eternity. If the space reptiles got their energy from solar radiation, why would they have to eat at all?

Editorial: I have always tried to do what you suggest. *Astounding* will never reach its full maturity until you have large-size and smooth paper.

Darrow: Don't you think any other ending for *The Phantom Dictator* would have been back?

Hamison: Who told you that *Legion of Space* was one of the greatest stories published in *Astounding*? In my opinion that AKKA marred the story because there was not enough factual description to back it up. I have never found any tedious parts in Smith or Campbell. I don't see how their stories could be written any other way, because the plots are woven around scientific ideas, instead of the ideas just being incidental. The stuff in *The Avatar* was made to be skipped, anyway.

Conover: *Twelve Eighty-seven* certainly is science-fiction.

Cloud: My sentiments, exactly, except for Point Three.

Why do artists draw a lot of spheres floating out in space?

Did it ever occur to you that *The Upper Level Road* has a certain similarity to *The Gostak and the Doshes*?

Dold always draws the craziest switchboards, and his air-lock doors are always three times larger than necessary. I don't complain about his complicated machinery, however. If any-

body ever does, just tell them to take a look at the vitals of some real machinery.

Authors had better not describe any more weirdly glowing tubes of many colors in their machinery any more. Metal tubes are being used now.

Yours till *Night* becomes dawn again.—Milton A. Rothman, 2500 North 5th St., Philadelphia, Pennsylvania.

Is This Interesting?

Dear Editor:

In accordance with your campaign for supremacy in the science-fiction field, I have a suggestion which, I believe, will put *Astounding Stories* further out into the lead. I will not bother to criticize the stories, because every one knows that they are tops, but I wish to know what the other readers think about you publishing plans for different rocket ships each month.

This plan is followed by many airplane magazines with much success. Judging by myself, I believe that most science-fiction fans would like something more substantial than mere knowledge, and would like to build some models of space craft. Each month a ship could be taken from a ship in the feature story of an issue, and drawn by one of your artists. These plans would only need to be sketches, showing three views and a few construction notes, and would only occupy a single page.

The models can be made of balsa or white pine, and covered with model airplane dope. All these materials can be obtained at a model airplane store at a low price. The models should be six or eight inches long, and from one and one half to two and one half inches long. They may also be made in half, gluing them to a background.

Besides rocket ships, other models, such as rocket dromes, may be made. When the project is complete you will have a model well worth the time and money spent.

What are the opinions of other readers?—Charles Burhans, 2161 Mars Ave., Lakewood, Ohio.

We Try for 1 T. V. a Month.

Dear Editor:

I must thank you for printing that last letter. It proves that *Astounding Stories* is, at least, broad-minded. I hope that you will print this little shrapnel instead of dodging. Before I begin, I must say that *Astounding Stories* is actually better and on a higher level than the other science-fiction magazines.

You say your stories are thought-variant. Variant from what? Seven out of ten of your stories are the same skeleton from the same grave, dressed up with false teeth, a wig, and some glass eyes. The other three are not readable; they may be forgotten.

The great point of scientific-fiction is the imagination employed in the stories. Yes, I admit that science-fiction has imagination—a great amount of imagination. Why do not some of these fools come down to Earth for a moment and realize that while they are up in the clouds zapping Martians with ray guns and moving the Earth a few light-years, the human race is rapidly becoming extinct for lack of intelligent thinkers.

They are nothing more than parasites and impracticals who have not the foresight, or the brains, or the imagination, for that matter, to do a scrap of work or thinking for the benefit of their fellow men.

The average science-fiction reader is very interesting psychologically and falls into the very well-known category of a type of insanity. They are persons who, for some reason or other, are afraid of the world. They are weak, without the moral ability to get somewhere, and, therefore, create, as a protection to themselves, a dream world where they can hide from reality.

That dream world is science-fiction. There

they can have the very things that they cannot possess in actuality, attain the goals that never will be attainable, find the satiation of an insatiable desire, and comfort their minds. Minds that are so utterly inferior that even in their dreams they seek recompense by slinking away from the world in which they know success will never be theirs and making a supersympathetic dream world. That, oh, readers of Astounding Stories, is your reason, is it not?

I may have mentioned this before, but it is worth mentioning again: Theoretically, science-fiction is one half pseudoscience. What science! Even Einstein must be amazed when he reads that he has a competitor in breaking the Law of the Conservation of Matter or Energy—our dear friend van Kampen.

When that amateur magician, J. R. Fearn, starts to pull ether-destroyers and gravity-annihilators out of his top hat, which seems to be expandable, why all one can do is to gasp in wonder—wondering how any human being can ever sling such slush around as you science-fiction authors. And then you readers lap it up like nectar. Speaking of Fearn, he must have at least six thesauri to get all those synonyms. The old plan?—Holmes H. Welch, 1733 Canton Ave., Milton, Massachusetts.

We At Least Try.

Dear Editor:

Am I disgustified? Sometimes I almost lose my faith in the genus *Homo Sapiens*—to read the drivel of those who holler their heads off about mere trifles like wire staples, uneven edges, etc., when there is really so much to crow about and to enjoy.

It has been over twenty-five years since I studied any science. And then all I had was one year of high school physics, and half a year of chemistry. So I have no technical scientific education. But, I have a much finer heritage. I have imagination! And what a kick I get out of scientific fiction.

True, most of the science in it is way over my head. But the stories, almost without exception, are so well written that I can follow their themes and their scientific applications, even though I couldn't for the life of me begin to follow their scientific theories. But does that lessen my enjoyment of them? Not in the least. Nor do I care how much science is incorporated in the story—I can still follow it just as well.

For instance, I haven't the slightest idea of even the first theorem of "orders" such as Dr. Smith uses. But does that detract from the thrill the Skylarks give me? No! I don't know a darned thing about fourth dimensions; I couldn't tell you the first link in the chain of reasoning that would lead to working out an antigravity mechanism, but does that make *The Mightiest Machine* less interesting reading? I should say not! I don't even know the law of the conservation of energy, except in a generalized way. But did that make me disgusted at *The Irrelevant*? Hot dog, what a story.

I read all three, and also watch the other magazines for any chance scientific story. Although I may grade them in my mind, I find so many swell stories in all of them that the few seemingly poor ones do not take away one bit of my enjoyment of all of them.

In fact, what I thought the finest scientific story was not in any of the three, but the wonderful *When Worlds Collide* and its sequel in the Blue Book. But why then should I call any of the others punk? It's the folks who take up valuable space with those ravings that make me, as I started by saying, "Disgustified."

This I must say, in all fairness to you. You have, in the past two years been leading the way forward and upward and the new policy you have been pursuing reflects not only in the steady advance you have made with Astounding Stories, but has caused the other two to get up on their heels and aim higher. So all of us have benefited. And for that my very kindest thanks, and my sincerest best wishes.

I haven't the knowledge to make any constructive suggestions, but I can cheer you along your weary road toward that high eminence which you vision, and can stick by you and work, as I have been toward attracting new readers to you, as my contribution toward a bigger and better Astounding Stories.

And three times a month, or more, I can fill my soul with new, different enchantingly imaginative fiction that partially satisfies the craving of a desk-bound body for the thrills of far distance and great achievements.

What a fine advance in power and sheer writing ability Donald Wandrei and Nat Schachner are making. I believe they are our coming stars—to rank with Smith, Campbell, and Fearn. But softly—I liked *Lo!*—E. Everett Evans, 95 W. Fountain St., Battle Creek, Michigan.

He Likes Weinbaum!

Dear Editor:

Congratulations on the October issue of Astounding Stories. Undoubtedly it is the best yet. Out of all the array of talent presented in the issue it is a hard task to name the best story but I think the honor goes to Stanley G. Weinbaum for his *The Planet of Doubt*. All Weinbaum's stories have an indefinable quality which make them masterpieces. Who can forget his *Flight on Titan*, *Parasite Planet* and *The Lotus Eaters*.

Williamson's *Islands of the Sun* finished well up to the standard set by the first part, while the new serial, *I Am Not God*, by Schachner, shows great promise.

Don A. Stuart's *Night* was beautifully written and a fitting sequel to *Twilight*. In fact, the only complaint I have against the whole issue is Marchion's first illustration for *The Way of the Earth*. Couldn't he have made his space reptiles a little more convincing? They, combined with the wording below the illustration, made the whole rather ludicrous, to say the least.

I see there are renewed requests for the return of such old favorites as Hawk Carse and Commander John Hanson to your pages. There are not many characters who appeared in the old Astounding who are as worthy of resurrection as those two, and especially the latter—couldn't you do something about it, Mr. Editor?

With regard to your artists: Elliott Dold, Jr. is the best for inside work, though I like a few by Marchion for variety. Sometimes there is a lot of sameness about Dold's gigantic machines, uniformly dressed men, etc.

I don't like C. R. Thompson's drawings particularly. They seem exaggerated till they verge on the fantastic. Take *Intra-Planetary*, for instance: the white monster is supposed to represent a white corpuscle. I ask you now, would any self-respecting white corpuscle look like that? The same applies to the bacteria.

Howard V. Brown continues to turn out excellent covers. The one for *The Galactic Circle* was his best of late, but why Saturn and a few other worlds floating around in space so close to Earth?

In closing, may I again congratulate you on your fine publication?—J. H. Plimsoll, 212 Ashby Rd., Burton-on-Trent, Staffordshire, England.

Overshadowed by "Night."

Dear Editor:

Hurrah for that marvelous tale, *Night*, by Don A. Stuart. I have never seen a sequel that surpassed the original story, but *Night* is the exception. It towers over *Twilight* like a skyscraper over a hut. It is beautiful. Although you have published other great stories, *Night*, I feel, is the greatest.

Often, while reading a story I can hear a play over the radio, but while reading *Night*, although a very interesting play was on, I was entirely unconscious of everything. Stuart's

mode of description is hauntingly beautiful and yet sad.

After finishing *Night* I sat in my armchair lost in thought, so wonderful was the spell woven around me. While he was describing the Earth, Sun and stars, I was carried away with him, seeing that incredibly sad and lonely scene. While he was pressing the Neptune button, I was hoping with him that life might still exist somewhere, somehow.

As for the rest of the issue: although it was excellent, it was overshadowed by *Night*. The one story I did not like was *Faceted Eyes*, which was merely another laboratory-monster story.

Weinbaum's "Pat" and "Ham" story was good, as usual. *I Am Not God* is excellent, as most of Nat's stories are. All in all, it is probably the best issue yet put out, principally due to *Night*, which alone was worth the price of the entire magazine.

Thanks for printing my humble letter in Brass Tacks. Down with Tucker and up with Astounding Stories, our magazine. So, until we get a quarterly, I am longingly and hungrily waiting for the next issue.—Lynman Martin, 65 Howe St., Marlboro, Massachusetts.

Stories That Live!

Dear Editor:

Night, *The Planet of Doubt*, *Derelict*, *Islands of the Sun* and *I Am Not God* are the stories I enjoyed in the October issue. As to why I liked them: well, let's disregard the fact that the authors are well known and have turned out many good stories in the past. The stories are all well written. By well written I mean that they have a smooth, finished style that causes the reader to live the story. He can read straight through without glancing from the magazine at the least noise or interruption.

Weinbaum, who is one of my favorite authors, can certainly turn out new conceptions of life. Gallun had a brand-new idea in *Derelict*, which is a gem of a short. Williamson can always make the most fantastic ideas sound logical.

I don't mind occasional stories which stress action and adventure like *A Princess of Pallis*, but that story was too hackneyed in plot. The same goes for *The Way of the Earth*.

The monster idea used in *Faceted Eyes* is sort of stale.

There was nothing to *Phantom Star* except the scientific idea which could have been used to a better purpose.

Intra-Planetary, one of those odd stories you print from time to time, turned out to be another blood-stream tale which I half liked because of its oddness.—Jack Darrow, 4224 N. Sawyer Ave., Chicago, Illinois.

On Interest and Suspense!

Dear Editor:

I hope you close your eyes and let this slip into Brass Tacks. You have received many letters asking for word limits, straight edges, sister magazines and quarterlies, but to no avail. Why? Because we are unreasonable, we want too much and are not satisfied with the best magazine on the news stands.

Mr. Editor, we don't know the obstacles you have to clear out of the way before you can go any further, but we have a vague idea. We let our likes and dislikes be known to you and trust that you will do all you can. Therefore, I submit my plan to your attention.

On the third Wednesday of each month I procure my copy of Astounding. In one week I have read it from cover to cover, and settle down for a long wait until the third Wednesday of the next month.

What happens? I grow impatient and by the beginning of the next month I can't stand it any longer, so I go down to the nearest news stand and buy a copy of some other magazine of the same variety as Astounding. I spend forty cents

on magazines other than Astounding. Now, here is the supposition of that mess of words.

I would sooner buy two Astounding magazines per month, and get a better bargain, and not have to wait so long for them, than to spend money on poor science-fiction. A new reader loses his interest before the book comes out again, and an old reader is in suspense until he is beyond human aid, that is, until he is pacified with another Astounding. Give us two books a month, and I shall forever keep my peace. Or tell us that it is not possible, and I will be satisfied.

Does Jack Darrow know who wrote *Into the Hydrosphere* and what magazine published it? Or if any one does, would they please give me that information?

Those space-travel stories get a hearty welcome from me. They are the spice of the program, as a fellow says.

The story *Derelict* was the type I like. They are adventurous without the blood and thunder. Will the character in the story ever go back to the derelict when the battle is over? He should, for better or worse.

Night was a very fitting sequel to *Twilight*.

I like two-part serials, because you don't have to wait so long for them to end. To Miss Poppe of Pennsylvania: Tucker said the keepers let him go. For your information, Miss Poppe, let me explain: The keepers were merely a figment of Tucker's imagination, brought on by hypnotic suggestion. Although it failed, he is taken care of. He is on a space-bent island with a phonograph and a record that tells the wonders of metals and their uses, and explaining the evils of chewing gum when mixed with paper.

Well, I've said too much for one time.—Ross Wilson, Jr., R. F. D. 2, Box 89A, Chesterfield, Missouri.

We Try To Keep the "Forum" Open.

Dear Editor:

Thanks a lot for publishing my letter in Brass Tacks. I hope this one too, will find its way into the magazine. Well, Mr. Editor, I am going to disagree with you on one point. You stated in an issue of a few months ago that *Islands of the Sun* was Jack Williamson's best effort to date. Now *Islands of the Sun* was a very good story, but I think that *The Legion of Space* outclassed *Islands of the Sun* by a mile.

Superartist Elliott Dold gets better and better with every issue, and so does Marchioni. I believe, however, that Dold made a mistake by making the two figures at the left-hand side of the first illustration of *The Planet of Doubt* so much alike. However, Dold is by far the best artist in the business.

This month's cover was very good, also. *I Am Not God* surely is an engrossing title for a science-fiction story. The figure of Steve, on the cover, looks almost real enough to be a photograph.

We had some fine science-fiction this month in Astounding Stories. The four best stories were — serials barred — *Night*, by Stuart, *The Planet of Doubt*, by Weinbaum, *Derelict*, by Gallun and *The Way of the Earth*, by Daniels. Of the four mentioned, *The Way of the Earth* was the best in the issue. David R. Daniels has turned out consistently excellent stories for Astounding Stories. Keep him writing!

One letter which was written by Douglas Mayer had a wrong idea of *The Son of Old Faithful*. He said, "A rocket would expend the same energy in escaping from the Earth whether it was heading for the Moon or for Mars."

He said that because the idea of sending fuel to the Moon and using the latter as a starting off point was not thought-variant. It is a simple matter to put Mr. Mayer to rights. Several rockets start out for the Moon, each carrying an extra supply of fuel. When they arrive, they put their extra fuel into one rocket, which takes off for Mars. Because the gravity of the Moon is so slight, the rocket expends very little energy in escaping from the Moon; therefore, it is easy for the rocket to reach Mars. It is understood,

of course, that the first several rockets have enough fuel to get back again to Earth from the Moon.

I want to agree with Mr. H. H. (Kaletsky) Welch on one point in his letter: letters in Brass Tacks like that one which started "Oyez—Oyez—Oyez!" Why, oh why, do you put them in Brass Tacks, Mr. Editor? They do not contain humor of any sort; they merely take up useful space.

Twelve Eighty-seven was not science-fiction. It was not interesting, because it did not progress fast enough, because it did not contain enough science, and a host of other reasons. It, too, took up valuable space.

I hope you are not trying to stress the 160 Pages and hide your stories behind big names. Please remember that we readers want quality, not quantity.

I will close this letter with an age-old but fervent prayer—for a quarterly. Best of luck!—Douglas Blakely, 4516 Edina Blvd., Minneapolis, Minnesota.

How About a Series?

Dear Editor:

I am not in the habit of writing letters to express my approval or disapproval of a magazine or its articles. However, I must make an exception in the case of *Astounding Stories*. I have read science-fiction magazines since their inception a number of years ago. To-day I can truthfully say that there has never been another magazine published containing such a magnificent collection of exceptionally fine and truly great stories of this type.

As a matter of fact, the high character of your stories has so increased my appreciation of this type of story that I have given up reading competing magazines. The stories which they publish are so much lower in general tone that I no longer relish them.

However, the above little bouquet was not the real incentive to writing this letter. I have finished reading the October issue of *Astounding Stories*, and Raymond Z. Gallun's story *Derelict* has freshly brought to mind a point which may be of interest to you.

The point is this: I have often wondered why Street & Smith did not publish a magazine every two weeks or month in which one character is maintained through the entire series, dealing with science-fiction.

As I have said, Gallun's story brought this forcibly to mind. Here is a story with excellent possibilities in this respect. The main character has yet to start the completion of a task he left unfinished. He has at his disposal a magnificent interplanetary vehicle.

I believe that Mr. Gallun could work out a series, such as I have proposed, carrying the main character, Jan Van Tyren, through a series of adventures both in the solar system and then through the universe. This author has an exceptional technique, almost as good as Dr. Smith—the *Skylark* series—for this type of work.

I would suggest full book length, since this permits of a thorough treatment of each incident, satisfying those people who do not like continued stories. This would also offer the possibility of an exceptional contribution to the cause of science-fiction literature. I would appreciate hearing your and Mr. Gallun's remarks upon this subject.

Just one more point before I close. I am in favor of a free flight of fancy in the realm of science-fiction, provided that the author does not violate any of the present-day accepted standards and axioms of science, without giving a suitable explanation for such procedure.

Inasmuch as I study science in general and practice chemistry in my own laboratories, I realize that there are very few of these axioms which could be listed as absolute truths. However, I like to be able to understand the manner in which the author's mind is working when he passes these by.

I would like to cast another vote in favor

of publishing *Astounding Stories* semi-monthly. A month is too long to wait for each issue.

Again let me compliment you on the finest science-fiction magazine that has been published.—Robert S. Pratt, 49 Sealy Drive, Cedarhurst, New York.

Brickbats and Boons!

Dear Editor:

Thank you so much for my copy of *Astounding* for September. Always I feel so, just as if *Astounding Stories* was a personal gift to myself from you. I should like to congratulate Marchioni on producing the best drawing this month, that for *Earth Minus* by Wandrei. This drawing—the first one, I mean—is the best I have ever seen in any science-fiction magazine. I congratulate you, Mr. Marchioni, and name you the uncrowned king of science-fiction artists. The drawing has depth and breadth, and is weird and mysteriously lonely and empty. I haven't read the story yet, but it looks great fun.

I don't like Fearn, and am sorry to see him back—the opposite for Williamson. Cheers for Miss Moore. She is one of your three best authors. The other two are Stanley G. Weinbaum and Murray Leinster.

I am sorry to see our one and only Frank B. Long has chucked his old style of writing. *The Space Rock* was, well, not good, anyhow. It is an old idea, you know, the hero finding some bizarre mystery, and not being able to spill the beans because of the na-a-fhty disbelieving crowds. Don't you think so, Mr. Long? I do.

All very well, all this stuff about the supreme science-fiction master, Taine, but you know and I know, too, that he isn't. The one and only man is David H. Keller, M. D., author of *The Metal Doom*, *The Evening Star*, *Unto Us a Son Is Born*, *The Human Termite* and many others.

Stand forth, Harl Vincent, your end is near—I wish it was! I bought a couple of old *Astoundings* the other day, and it was just a shame! One story was called *Wanderer of Infinity*, and the theme was about something called planes of dimensions, no, oscillation. In the June, 1935, issue of *Astounding* he wrote something called *The Plane Compass* and talked in that about planes of perception and oscillation intervals. Ooh, you naughty plagiarist. Both stories yours, of course, but still?

What readers mean by burbling about how lousy science-fiction was in 1932-1933 I can't think, as science-fiction was never better. You say it's so? I don't think so. *Astounding Stories* for March, 1933, had the following line-up: Jack Williamson, Arthur J. Burks, Wallace West, Sewell Peaslee Wright, Harl Vincent, Murray Leinster. These names number among the brightest of your stars including Burks and Wright, whom you never have at all! Don't tell me the stories were lousy—I've read them all.—Francis L. Ellissen, 6 Cardigan Rd., Richmond, Surrey, England.

A Pat on the Back!

Dear Editor:

This is my first letter to Brass Tacks, and I hope it will be published. Now to get down to brass tacks about the stories.

In the October, 1935, edition: *Faceted Eyes* is interesting. Best of all in the whole book was *Derelict*, by Raymond Z. Gallun. It was positively the most interesting story I have ever read. I must have a sequel or my forward guns will boom and Brass Tacks will have another letter.

I must say, though, that *Astounding* is the best magazine that I have ever read, and may the editor have a pat on the back. Keep up the good work.—Marleston Wright, 2119 Arrow Ave., Anderson Indiana.

AST-10

FAMOUS AVIATORS TELL WHY CAMELS ARE Milder



Lieutenant Commander Frank Hawks, U. S. N. R. (left), holder of 214 speed records and the Harmon Trophy, comments: "As the athletes say, Camels are so mild they don't get the wind. And I've found they never upset my nerves. Camel must use choicer tobaccos."

"Camels don't get your Wind" Athletes say



"Camels refresh me so when I'm fatigued," says Sir Charles Kingsford-Smith (above), who made the record-breaking transpacific flight. "And they are so mild that I can smoke any number of Camels without throwing my nerves off key."

"They Never Tire Your Taste"

"I smoke Camels all I want," says Colonel Roscoe Turner (right). "I enjoy Camels more. Because of their mildness they never tire my taste. And after smoking a Camel, I get a 'refill' in energy—a new feeling of vim and well-being."

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CAMELS ARE MILD,
TOO—BETTER FOR
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